DOCUMENT RESUME

ED 256 939 CE 041 492

TITLE	Modified Building Trades. A Parallel Curriculum for Mainstreamed Handicapped Students.
INSTITUTION	Texas A and M Univ., College Station. Dept. of Industrial, Vocational and Technical Education.
SPONS AGENCY	Texas Education Agency, Austin. Dept. of Occupational Education and Technology.
PUB DATE	[85]
NOTE	177p.; For a related document, see CE 041 493.
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Building Trades; Carpentry; Classroom Techniques; Construction (Process); Construction Materials; Curriculum; *Disabilities; Disadvantaged Youth; *Employment Potential; Entry Workers; Exceptional Persons; Flooring; Industrial Arts; *Job Skills; Job Training; Learning Activities; Learning Disabilities; *Mainstreaming; Roofing; Secondary Education; Special Education; Teaching Methods; Trade and Industrial Education; Vocational Education

ABSTRACT

This curriculum guide has been developed to assist vocational and special education teachers in teaching handicapped and disadvantaged students in a building trades course. The guide contains suggestions and experiences that are necessary to support the achievement of specific competencies. The guide is divided into units of instruction containing major and minor blocks. It is sequenced secondarily to skills or jobs that progressively build upon one another. Activities and experiences for both regular and special needs learners are provided. These activities are explained in notes to the teacher. All of the units of instruction are intended to enable students to develop skills for employment in the building trades field. The first four units of this guide are directed toward developing acceptable behavior by handicapped students for the work world. They provide extensive explanations to the teacher of what to teach and how to teach it. Material covered in these units include the following topics: how to use the guide and the rationale for it, preliminary occupational exploration, pre-employment laboratory application, and preparatory instructional development. The second part of the guide contains a four-unit project for building a single-family dwelling. Units cover concrete foundation, walls and partitions, roof, and finishing. Parallel tasks and expectations for regular and handicapped students are provided. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

not NCC

ED256939

MODIFIED BUILDING TRADES

A PARALLEL CURRICULUM

For Mainstreamed Handicapped Students

Developed by:

Vocational Education for Handicapped
Research Project Staff

Gonzalo Garcia, Jr., Director
Gayle Todd, Co-Director
Sondra Cooke, Co-Director
Jeffery W. Moss, Principal Investigator

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

V Bristow

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CE041492

Directed by:

Texas A&M University
Department of Industrial,
Vocational and
Technical Education
College Station, Texas

In cooperation with:

Texas Education Agency
Department of Occupational
Education and Technology
Austin, Texas

ACKNOWLEDGEMENTS

Several individuals have contributed to the completion of this Building Trades curriculum guide. Donna Fairbanks served as project secretary and worked on the project with dedication. Diedre Shaw worked as a graduate assistant on the project. Special thanks are due to the staff of the Industrial, Vocational and Technical Education Department who provided assistance with the coordination, editing, and typing of the curriculum guide. These include Sally Lesher, who provided assistance in the coordination and development of the guides, Sharon Garcia, Katie Hunt, Wanda Price, Sheryl Richardson, Vicki Taylor, and Ellen Weichert.

The members of the advisory committee listed below provided valuable suggestions towards the development and revisions of the curriculum guides. They include:

Mrs. Mary Kay Byrne
Dr. Don Clark
Dr. Linda Glossen
Mrs. Eleanor Mikulin
Mr. Ed Trawick
Mr. Neil Overstreet
Dr. Linda Parrish
Mr. Carl Roesler
Mrs. Mildred Thomas
Mrs. Arie Warza

These individuals are to be truly commended for their input. A special thanks is extended to Mr. Leroy Williams who did the initial development of this guide. Special appreciation is also extended to Ms. Mary Bradley, Bryan High School, for her assistance in reviewing each of the curriculum guides.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.. i

BUILDING TRADES: Modified Curriculum for Handicapped Students

Rationale.. 1
Contents of Guide.. 1
How to Use Guide.. 2

PRELIMINARY OCCUPATIONAL EXPLORATION 4

Effects of Handicapped Upon Program.. 4
Rationale for Including Handicapped Students.. 5
Occupational Working Conditions.. 6
Comparative Characteristics of Mechanics and Workers.. 8

PRE-EMPLOYMENT LABORATORY APPLICATION 12

Broad Analysis of Construction Occupations.. 13
Prerequisites and Objectives for Exceptional Students.. 16

PREPARATORY INSTRUCTIONAL DEVELOPMENT 25

General Observations of Program Modification.. 26
Specific Areas of Parallel Instruction.. 27
Social Skills.. 28
Verbal Skills.. 91
Computational Skills.. 101
Specialized or Shop Skills.. 103

CONSTRUCT A SINGLE-FAMILY DWELLING

CONCRETE FOUNDATION 106

Prepare Foundation Earthwork.. 107
Erect Foundation Formwork.. 113
Prepare Foundation Subgrade.. 117
Install Foundation Concrete.. 124

PROJECT WALLS AND PARTITIONS.. 128

Construct Exterior Wall Framing.. 129
Construct Interior Partition Framing.. 132

PROJECT ROOF 134

Install Ceiling Joists.. 135
Construct Roof Framing.. 136

PROJECT FINISH.. 139

    Dry In Exterior Framing.. 140
    Install Exterior Finish.. 145
    Install Interior Finish.. 148
    Landscape Project Grounds.. 159

A Rationale for Integrating Special Needs Students in Regular Vocational Programs

As a result of recent legislation, handicapped and disadvantaged students may participate and develop their potential in regular vocational education programs such as trade and industrial education, home economics, and vocational agriculture. Vocational teachers who have taught special needs students have found that the abilities shown by handicapped and disadvantaged students has been greater than expected. Through mainstreaming efforts, many special needs students have joined and participated in regular vocational programs.

The greatest challenge facing vocational teachers today comes from the equal rights legislation. One of the educational rights guaranteed to special needs learners through the legislation is access to regular vocational programs where salable skills can be developed. Equality of educational opportunity for all students can only become a reality if vocational teachers and other school personnel make the commitment to serve special needs students. Without this commitment on the part of all educators, special needs students will continue to experience difficulty in developing to their fullest potential and in becoming productive workers.

Appropriate vocational education for handicapped and disadvantaged students should include educational instruction and training appropriate to the needs of each individual. The responsibility of each vocational teacher is to accept all learners, including special needs learners, as capable individuals and to assist all learners to become productive individuals in society. Facilities modifications, adaptive equipment and aids, instructional materials, and curriculum alternatives are necessary and critical if special needs students are to successfully develop a vocational skill. Therefore, these curriculum guides are offered as means and resources to assist vocational and special education teachers to provide special needs students with appropriate vocational education opportunities, experiences, and activities. These curriculum guides have been designed for use with handicapped, primarily learning disabled, and disadvantaged students. It is hoped that the information presented in these guides will assist handicapped and disadvantaged learners to enter and succeed in regular vocational education programs.

Building Trades: A Modified Curriculum for Handicapped Students

Building Trades is one of three guides developed for use in teaching handicapped and disadvantaged students. Other guides developed as part of this project were in the areas of Homemaking I and Vocational Agriculture I.

Contents of the Guide

Each curriculum guide, with the exception of Building Trades, was conceptualized and developed following the format and standards specific to the subject matter area. The content for each guide is based on the tasks and competencies needed by students entering secondary vocational-technical programs. The content for each guide was developed through the use of suggested learning activities and experiences. Competencies refer to the knowledge, skills, and behaviors needed by students in order to succeed in regular vocational programs.

How to Use the Guides

These curriculum guides have been developed to assist vocational and special education teachers in teaching handicapped and disadvantaged students. The curriculum guides are intended to be used to assist students who have different learning abilities. The guides contain suggestions and experiences that are necessary to support the achievement of specific competencies. Each guide is divided into units of instruction containing major and minor blocks. Each guide is sequenced secondary to skills or jobs that progressively build upon one another. Activities and experiences for both regular and special needs learners are provided. All of the units of instruction included in the guides have as their purpose to enable students to develop skills for employment in the respective field.

Vocational and Special education teachers are encouraged to modify and/or adapt these curriculum materials to fit their particular situation or community. Teachers are encouraged to use judgment in selecting and using learning activities and experiences that will enable students to succeed in vocational programs. The specific competencies to be developed should be selected on the basis of students' needs, interests, and abilities. This guide should serve as a valuable resource for program planning and curriculum development at the local level.

MODIFIED BUILDING TRADES

A PARALLEL CURRICULUM

For Mainstreamed Handicapped Students

INTRODUCTION

Building Trades is a regular vocational pre-employment laboratory designed to provide preparatory instruction for students directed toward employment in the construction industry. This industry provides a broad spectrum of occupational opportunities for a wide range of job applicants. Although, analytically, construction jobs fall into three categories—professional, technical, and occupational—in building trades programs, emphasis is almost exclusively upon the occupational category. More specifically, even though most semi-skilled and unskilled construction jobs also are occupational, building trades programs typically are designed to prepare students for skilled occupations. Presumably, program completers are directed toward ultimate employment as building crafts mechanics. However, in building trades programs, more than skilled occupational training could, and probably should, be considered. The semi-skilled and unskilled job categories—also occupational employment—should be included, as well.

Germaine to the point, some handicapped students are mainstreamed and are suitable recruits for building trades programs, even if their capacity for construction employment is limited to semi-skilled or unskilled occupations. That is to say, when certain Special Education students are returned to the regular classroom, they have the potential for some level of success in building trades programs and, ultimately, in the construction industry. These students can both benefit and be a benefit by their participation in building trades courses which have been modified to more closely approximate the total occupational continuum in the construction industry. After all, any vocational endeavor is most successful when the work-simulation environment closely resembles the industrial area it represents. In the construction industry, skilled mechanics and semi-skilled and unskilled workers work side by side. In building trades programs, while regular students prepare for jobs as construction mechanics, handicapped students can prepare for jobs as construction workers. Thus, the work-simulation environment can be fully rounded out.

The contention here is that, with reasonable effort, current building trades instruction can be modified to meet the needs of certain mainstreamed exceptional students. The intention here is to develop the basis for such a modification: a parallel building trades curriculum outline to aid in preparing certain mainstreamed exceptionals for entry level occupations as construction workers.

In the development of a parallel building trades curriculum, modified for mainstreamed individuals, there are several aspects to consider: (1) effects on the regular program; (2) rationale for including handicapped; (3) occupational working conditions; (4) comparative characteristics of mechanics and workers; (5) broader analysis of construction occupations; (6) enrollment prerequisites and terminal objectives for handicapped; (7) specific areas of parallel instruction. These aspects fall into three categories: (I) Preliminary Occupational Exploration; (II) Pre-Employment Laboratory Application; (III) Preparatory Instructional Development.

ONE: PRELIMINARY OCCUPATIONAL EXPLORATION

If a regular building trades program is to be expanded to include handicapped students and to provide parallel instruction for these handicapped, it is essential that both the construction industry and the vocational program are further explored and analyzed. The industry, itself, provides a continuum of job opportunities for applicants ranging from the highly educated and trained professional to the virtually illiterate and unskilled worker. On the other hand, building trades programs traditionally have been designed to skirt the fringes of professional and technical occupations, to stop short of semi-skilled and unskilled jobs, and to provide instruction and training for building crafts mechanics' occupations. Little emphasis is placed on professional and technical jobs requiring post-secondary training or education. Even less attention is given semi-skilled and unskilled jobs requiring less than either high school graduation or attainment of course objectives. Yet, these jobs are all available in the industry. Some building trades students will go on to post-secondary training, either in academic or technical institutions of higher learning. Others, perhaps more, will drop out of high school and hit the job market. Would a building trades teacher consider a failure the completer who becomes an architect or engineer, drafter or estimator? Why, then, should the student be considered a failure who, as a dropout or low achiever, enters the industry as a semi-skilled or unskilled worker? Who can say that whatever success the student has is not related directly to building trades enrollment? No matter that the student, in either case, never becomes a highly skilled building crafts mechanic. And a priority consideration for the building trades teacher is this: many, perhaps most, dropouts and low achievers will be handicapped students. In view of this reality, building trades teachers should consider the following: (1) effects of handicapped students upon the regular program; (2) rationale for including handicapped; (3) occupational working conditions; (4) comparative characteristics of mechanics and workers.

I. EFFECTS OF HANDICAPPED UPON THE PROGRAM.

Since not all building trades students aspire to attain either course objectives or occupational ideals, why not allow a wider range of students to achieve whatever success they need or want in a broader based vocational program? If their educational, physical, and social prerequisites permit safe, healthy, and gratifying participation, what is to prevent their enrollment? Under such revisions of program objectives, even certain mainstreamed handicapped students would be eligible. These, too, would have the opportunity to be trained for entry level construction jobs. Such a modified program would need to provide parallel instruction—one part for regular students aimed toward jobs as construction mechanics, the other to direct handicapped toward jobs as construction workers. A primary factor in such a program modification is the evaluation of possible effects, either detrimental or beneficial, upon the regular program plan of training and instruction.

The inclusion of handicapped students in a building trades program must not, in any way, compromise the integrity of occupational training and instruction for regular students who are enrolled. This essential condition should be maintained carefully in whatever facilitation is provided for both regulars and handicapped. The modified curriculum should parallel the regular, so that handicapped may move along at the same rate as regular students. However, skills and knowledge acquired may not—likely, will not—be identical in all cases. For that matter, neither will objectives or assigned work always be the same for both regulars and handicapped, even though both will work side by side. But similarly, in actual construction situations, mechanics and workers perform their respective jobs, working together toward a common goal, the finished project or product. In this respect, a modified building trades program will more closely approximate the real construction industry environment. In such a modified work-simulation environment, where skilled, semi-skilled, and unskilled occupational instruction and training are provided, a more complete image of the construction industry is presented. Thus, instead of parallel instruction and training for handicapped compromising the integrity of the regular program, such modification of the curriculum could even enhance opportunities for regulars, while providing opportunities for handicapped students, as well.

What detriment, if any, would handicapped be to the regular program, what benefit could handicapped derive, and what contributions could they make to the overall program? Very likely, providing enrollment and participation posed no hazard to their own health and safety, their presence posed no threat to the training and well-being of regular student, and their scholastic ability permitted even marginal success at desk work, handicapped students would be much more beneficial than detrimental to the overall program. Just as there are many jobs to be done in construction work which do not require highly developed skills, so are there many tasks in a building trades program which are essential, yet require little skill. With proper structure and guidance, handicapped students can perform the many daily chores of cleanup, storage, lockup, tool care, material salvage, and the like. Such an arrangement would relieve regular students of these chores, while providing them more time to apply to skills development. At the same time, nothing would prevent any individual handicapped from participating in the more skilled aspects of the program, as personal ability would allow. All in all, with proper regimentation, the inclusion of handicapped in the program should have more positive than negative effects. Such benefits, to regulars, handicapped, and to the overall program, provide a rationale for recruitment of handicapped as students in building trades programs modified to include parallel instruction.

II. RATIONALE FOR INCLUDING HANDICAPPED STUDENTS.

While it is unlikely that any significant number of handicapped students could meet prerequisites or attain objectives for secondary level preparatory training for skilled occupations, or for post-secondary professional or technical training, many would likely qualify and succeed in preparatory semi-skilled or unskilled occupational training and instruction. Also, while most regular students would neither need nor want training for jobs below the skilled craft level, such training might be essential to the preparation of handicapped for entry level construction occupations. Furthermore, the semi-skilled and unskilled jobs, passed over by regulars entering the job market, might be most desirable to exceptionals who do not have the natural dexterity, kinesthesis, or other inherent abilities essential to the skilled craft mechanic. Ideally, though not entirely actualized, building trades students are recruited for two years, simultaneously completing their vocational training as they graduate from high school. Primarily, students are recruited from the eleventh grade with the aim in view of two consecutive years of enrollment. However, elective credit for the course is awarded, whether or not they remain enrolled both years. Also, under certain conditions, twelfth graders are recruited for one year's enrollment. Some older tenth graders are allowed to enroll. For the most part, course instruction for both years of enrollment is identical, providing only the benefit of additional opportunities for skills practice and drill. Therefore, since course ideals exist only in theory, perhaps the inclusion of handicapped would have very little effect upon present program realities. In any event, effects likely would be more plus than minus for all concerned. Not only handicapped and regulars, but also vocational programs and the construction industry would benefit. Handicapped will increase their capacity for employability, regulars will have more time for skills drill and practice, programs will enlarge the capacity for training more students to enter the world of work, and the industry will have the advantage of better trained workers entering all levels of employment. So long as the inclusion of handicapped creates no impediments for regular training and instruction, poses no hazards to the health or safety of regulars or handicapped, and does not detract from the authentically vocational, work-simulation environment, the positive aspects of a modified, parallel instruction program should far outweigh any minor inconveniences. Such a parallel modification entails the close examination or real construction industry occupational working conditions.

III. OCCUPATIONAL WORKING CONDITIONS.

While scholastic and dexterity deficiencies may not be detriments to handicapped students entering properly modified building trades programs, the same is not true of physical impediments which are not compatible with occupational working conditions in the construction industry. Individual scholastic and dexterity differences are provided for in the different levels of occupational training and instruction. However, working conditions for all construction occupations are identical. Therefore, physical requirements for both construction mechanics and workers are virtually the same. Construction occupation working conditions are vital considerations in the development of prerequisites for handicapped students entering building trades programs. These working conditions may be outlined in very broad and general terms by examining them in four categories: (1) work locations; (2) work activities; (3) work hazards; (4) hazard controls.

A. WORK LOCATIONS. Locations and conditions at those locations, which mechanics and workers will occupy and encounter, are listed below. These locations and conditions are very nearly like those in the performance of building trades tasks.

1. At, above, or below ground level.

2. Inside and outside of finished and unfinished structures.

3. In, on and/or around scaffolds, ladders, chutes, braces, supports, joists, shores and hoists.

4. Near electric, fuel, and air powered tools, and equipment.

5. In close proximity to the whole range of stored, stacked, or stockpiled construction materials.

6. On various footings ranging from finished flooring, temporary metal or lumber walkways, concrete walks and pavement, grass, earth, mud, dust, gravel, asphalt, and frozen or icy surfaces.

7. With extended exposure to noise, fumes, odors, dust, dirt, grease, grime, and poor ventilation.

8. In extremes of hot, cold, wet, dry, and windy weather.

B. WORK ACTIVITIES. Activities and postures, which these activities will require, and which mechanics and workers will perform and/or assume, are listed below. These activities and postures are very nearly like those performed and/or assumed in building trades tasks.

1. Extensive standing, climbing, squatting, bending, stooping, stretching, reaching, and walking.

2. Moderately heavy loads of tools and materials lifted, handled, or held, often in cramped or awkward positions, and often for extended periods of time.

3. Frequent use, handling, carrying, and holding of materials or substances which may be toxic, caustic, irritant, abrasive, or combustible.

4. Constant use, handling, carrying, and holding of tools and/or materials with sharp, pointed, and/or splintered surfaces and/or edges.

C. WORK HAZARDS. Inherent safety hazards which mechanics and workers will encounter are listed below. These hazards are very nearly like those encountered in building trades tasks.

1. Slips and falls.

2. Burns, electric shock, cuts, fractures, tissue separation, and asphyxiation.

3. Striking and/or being struck by falling, moving, or stationary tools, materials, machines, equipment, or any other object on the construction site.

D. HAZARD CONTROLS. Detrimental effects and safety hazards inherent to construction working conditions are controlled by specific employee safety and health programs. These programs are developed and implemented through input from employer association, trades unions and/or worker associations, insurance companies, and local, state, and federal regulatory agencies.

As in all other areas or fields of employment, the health and physical condition of construction mechanics and workers vary, within certain limits, with individuals. However, certain levels of fitness, to say the least, are normal or average, or amenable to medical treatment without impairment of normal or average fitness. These health, physical, and fitness considerations are vital in the establishment of prerequisites for building trades students, both exceptional and regular. Without health, physical, and fitness prerequisites, neither students, program, nor industry will benefit from the training and instruction.

IV. COMPARATIVE CHARACTERISTICS OF MECHANICS AND WORKERS.

Construction mechanics and workers, as all other employees in all other jobs, become proficient at their occupations through learning, knowing, and doing. Technically, learning, knowing, and doing occur through stimulation of three areas of behavioral characteristics: (1) associative, (2) cognitive, and (3) psychomotor. Associative behavioral characteristics have to do largely with learning, especially with the application of learning. Cognitive characteristics relate closely to retaining and recalling knowledge, or that which has been learned. Psychomotor characteristics pertain to individual abilities for doing, or for the physical manipulation of self and other tangible objects within the immediate environment. Work performance skills, abilities, and aptitudes stem from the associative, cognitive, and psychomotor capacities, capabilities, and characteristics of individual workers. Thus, the individual's potential for ultimate job classification, promotion, and advancement is mostly predetermined before entry into the world of work. Construction mechanics, for example, are extremely adept at a very narrow band of psychomotor skills which are reinforced by a certain level of cognitive ability, also within a very narrow band, and sustained by a necessary amount of associative proficiency in applying the psychomotor and the cognitive to an exacting work task. Beyond the special ability to perform the precise work task, the mechanic may or may not be socially, culturally, or intellectually adept. The real distinction of the mechanic is the ability to perform the highly skilled work task. On the other hand, the construction worker either cannot or has not developed any real psychomotor ability for highly skilled work. At the same time, the construction worker's job requires a high level of physical activity, coupled with the cognitive powers to learn job duties and responsibilities, and supported by the associative ability to relate the psychomotor and the cognitive to regular and consistent work performance. Again, work performance may or may not reflect the full capacity of the worker's associative, cognitive, and psychomotor characteristics. For both the mechanic and the worker, some of each work task is associative, some cognitive, and some psychomotor. In each instance, occupational preferences probably reflect individual strengths and weaknesses in these areas. Both the mechanic and the worker have become proficient at their occupation through learning, knowing, and doing.

Obviously, since all human behavior results from constant interaction of all behavioral characteristics of the individual, complete isolation of any one characteristic is virtually impossible. However, even though all behavior is integrative activity of all behavioral characteristics, in any given instance, one characteristic is largely dominant. For the purpose of comparison and analysis, the assumptions here are: that social skills stem from the associative; verbal and computational skills from the cognitive; specialized skills from the psychomotor. Elements within these three areas of behavioral characteristics vary widely among all individuals, and certain individuals with certain characteristics are better suited to certain types of work. Also, even within groups of these individuals, not all have the same capacities and aptitudes in all areas. Thus, some are better suited to certain specific jobs within a type of work. Therefore, some develop higher degrees of skills and abilities than do others, even within the same type of work. Hence, within the range of occupational opportunities in the construction industry, some individuals are better suited as skilled mechanics, others as semi-skilled or unskilled workers.

A comparative analysis of essential behavioral characteristics of occupational mechanics and workers include comparisons of all three elements: (1) associative characteristics; (2) cognitive characteristics; (3) psychomotor characteristics.

A. COMPARATIVE ASSOCIATIVE CHARACTERISTICS.

MECHANIC	WORKER
1. Safety and Health.	1. Safety and Health.
a. Follows all known safety rules and procedures.	a. Follows all known safety rules and procedures.
b. Uses all applicable safety equipment, apparel, and devices.	b. Uses all applicable safety equipment, apparel, and devices.
c. Watches out for safety of self and others.	c. Watches out for safety of self and others.
d. Gets adequate rest when not at work.	d. Gets adequate rest when not at work.
e. Uses psychologically and physiologically altering substances moderately, sparingly, and wisely, never at work.	e. Uses psychologically and physiologically altering substances moderately, sparingly, and wisely, never at work.
f. Practices good hygiene habits on and off the job.	f. Practices good hygiene habits on and off the job.
2. Loyalty.	2. Loyalty.
a. Appreciates source of livlihood; gives a day's work for a day's pay.	a. Appreciates source of livlihood; gives a day's work for a day's pay.
b. Expects employer to benefit from services rendered.	b. Expects employer to benefit from services rendered.
c. Recognizes personal security in prosperity of employer.	c. Recognizes personal security in prosperity of employer.
3. Integrity.	3. Integrity.
a. Takes pride in job and in work well done.	a. Takes pride in job and in work well done.
b. Takes care of employer's	b. Takes care of employer's

property as if it were personal property.	property as if it were personal property.
c. Strives to be a respected citizen at work and in the community.	c. Strives to be a respected citizen at work and in the community.
4. Sociability.	4. Sociability.
a. Equates gainful employment with personal identity and success.	a. Equates gainful employment with personal identity and success.
b. Identifies work with other meaningful elements in total personal environment.	b. Identifies work with other meaningful elements in total personal environment.
c. Shows respect and courtesy to all other persons on and off the job.	c. Shows respect and courtesy to all other persons on and off the job.
d. Accepts criticism from supervisors cheerfully and without anger or resentment.	d. Accepts criticism from supervisors cheerfully and without anger or resentment.
e. Gets along well with fellow workers.	e. Gets along well with fellow workers.
f. Assumes responsibility and accepts consequences for personal mistakes or choices.	f. Assumes responsibility and accepts consequences for personal mistakes or choices.
g. Strives to overcome bias, prejudice, and bigotry; overlooks these in others.	g. Strives to overcome bias, prejudice, and bigotry; overlooks these in others.
h. Fulfills duties and obligations of citizenship and neighborliness, as well as of home and family.	h. Fulfills duties and obligations of citizenship and neighborliness, as well as of home and family.
i. Uses recreational and leisure time in a safe, healthy, and wholesome manner.	i. Uses recreational and leisure time in a safe, healthy, and wholesome manner.

B. COMPARATIVE COGNITIVE CHARACTERISTICS.

MECHANIC	WORKER
1. Certificates, Diplomas, or Degrees.	1. Certificates, Diplomas, or Degrees.
High School Diploma or GED required for apprenticeship enrollment; licensing required for some crafts.	High School Diploma or GED desirable for work advancement; none required.

2. Verbal Skills.	2. Verbal Skills.
a. General reading and writing skills at upper high school level.	a. General reading and writing skills at social survival level.
b. Technical knowledge related to performance of job skills.	b. Ability to read or identify safety rules, material labels, etc.
3. Computational Skills.	3. Computational Skills.
a. General math skills at upper high school level.	a. General math skills sufficient for social survival.
b. Construction related math skills adequate for performance of job.	b. Limited math skills necessary for performance of job.

C. COMPARATIVE PSYCHOMOTOR CHARACTERISTICS.

MECHANIC	WORKER
1. At Least Average or Normal Faculties.	1. At Least Average or Normal Faculties.
a. Strength, endurance, and stamina.	a. Strength, endurance, and stamina.
b. Eyesight and hearing.	b. Eyesight and hearing.
c. Resistance to respiratory ailments and allergic reactions.	c. Resistance to respiratory ailments and allergic reactions.
	d. Manual dexterity and mechanical aptitude.
2. Above Average Faculties.	2. Above Average Faculties.
a. Alertness and agility.	a. Alertness and agility.
b. Balance and equilibrium.	b. Balance and equilibrium.
c. Manual dexterity and mechanical aptitude.	
3. Highly Developed Skill in Occupational Area.	3. Highly Developed Skill in Occupational Area.
a. Strong proficiency in use of hand and power tools related to skill.	a. Able to identify, handle, lift, and/or hold hand and power tools related to work at hand.
b. Expert ability in application or installation of materials related to skill.	b. Able to identify, handle, lift, and/or hold materials related to work at hand.

c. Exact precision in reading and interpretation of work drawings.	c. Able to assist the mechanic in any way necessary for job completion.
d. Professional ability to act upon personal judgments as to character and nature of specific tasks.	d. Mature ability to anticipate mechanic's needs for tools, materials, and assistance.
e. Able to utilize worker's assistance to best advantage.	e. Able to understand and carry out mechanic's instructions and directions.

TWO: PRE-EMPLOYMENT LABORATORY APPLICATION

Where traditional building trades programs have been designed to steer completers toward employment as skilled craft mechanics only, some handicapped students, as well as others, who could benefit by a modified program, likely have been passed over. In any vocational program where only highly skilled occupations are taught, the resulting work-simulation environment is a distortion of the real occupational environment. For, any selection of one area of skills training only is just one part of a much broader base of occupational jobs in the industry. Therefore, a much more authentic work-simulation environment can be developed where a building trades program is modified to offer handicapped and other students training for semi-skilled or unskilled construction jobs. Most, if not all, construction work is a four-handed job. The mechanic and the worker work side by side at a common task. The mechanic performs the more technical aspects of the work; the worker assists, as necessary, for completion of the task. Also, such is the nature of work performed in a building trades program. Students work together in group assignments to complete the various parts of the project. Much of the day-to-day work in the program has little to do with training or drill in skills development. Shop cleanup, tool care, materials handling, soil excavation, and many more such tasks are merely routine assignments which must be done in order to move along with the skills development aspect of the project. In actual practice, these semi-skilled and unskilled jobs are performed by workers other than skilled mechanics. The work-simulation environment of a building trades program modified to approximate this reality would accomplish two things: A broader base for providing occupational training for a wider range of students, and a more realistic setting for construction industry orientation. Freed from the necessity of performing the unskilled tasks inherent to the program, regular students would have more time to devote to skills training and drill. On the other hand, the unskilled tasks would provide a block of occupational training for handicapped students directed toward becoming semi-skilled and unskilled workers in the construction industry.

Prior to the development of parallel instructional curriculum to train handicapped for semi-skilled and unskilled construction occupations, two considerations are relevant: (1) a broader occupational analysis, and (2) prerequisites and objectives for handicapped.

I. BROAD ANALYSIS OF CONSTRUCTION OCCUPATIONS.

In regular building trades programs, trades analysis has traditionally been limited to training for skilled occupations; in a modified program, a broader analysis is necessary, in which construction occupations fall naturally into two categories: (1) the building craft mechanic occupations, and (2) the semi-skilled and unskilled construction worker occupations. Both categories would need to be included in a building trades program modified to accommodate both handicapped and regular students.

A. BUILDING CRAFTS MECHANICS OCCUPATIONS. In the final analysis, a student's enrollment in a building trades program is only a baby step toward ultimate employment as a construction mechanic. Even if students are enrolled three periods daily for the two-year maximum, only about 1,080 hours of instruction and training are provided. Apprenticeship programs run at least four years, some five years, for a total of about 8,000 to 10,000 hours. Even if credit is granted in an apprenticeship program for the building trades experience, the student is still about 90% away from the construction mechanic objective. However, this does not mean that the program completer is not ready for construction employment at the entry level, since the apprenticeship program is about 85% on-the-job training. The pre-employment laboratory experience is a valuable asset for helping the completer get a foot in the door. Both craft unions and employers have the highest regard for vocational education, and they welcome program completers in preference over high school graduates who have no vocational training. But building trades program completers are prepared for entry level employment only. They still have many years of both job and classroom experience ahead of them before they become construction mechanics. This experience is provided through apprenticeship programs. Most of these apprenticeship programs are provided through the crafts unions, although more and more non-union programs are being developed through employer associations in cooperation with state education agencies. Also, particularly in the specialty trades, employers and manufacturers provide various trainee programs.

1. Apprenticeship Programs. Usually, construction mechanics move up through the ranks of fairly formalized training programs called apprenticeships. Prerequisites for entrance into these programs included high school graduation or GED, certain age requirements, and a variety of other specifics, depending on the craft the apprentice is entering. Generally speaking, if the apprentice is working regularly and making satisfactory progress in the evening classroom sessions, wages will increase and status will change upwardly about every six months. Thus, over a specified period of years, the apprentice becomes a full-fledged construction mechanic. Upon completion of their apprenticeships, electricians and plumbers must also acquire a license. Carpenters, masoners, iron workers and painters are not required to be licensed. Although most apprenticeship programs are union related, some non-union programs recently have been developed. In either case, all authentic apprenticeship programs are affiliated with a state education agency vocational department. In many cases, union programs actively recruit high school graduates who are completers of building trades programs. Also, vocational directors or administrators in local school districts can assist completers in getting enrolled in either union or non-union apprenticeships. The advantage of non-union apprenticeships is that members have no dues to pay. Union apprentices, as well as mechanics, pay dues as long as they remain members of their unions. On the other hand, unions provide some retirement and insurance benefits which non-union employment might not provide. Also, especially in some localities, union work may be more

readily available, and at somewhat higher wages, than non-union work. In any case, the completer must be prepared for a lengthy period of working and training as an apprentice, before becoming a full-fledged construction mechanic.

2. Other Trainee Programs. For some construction crafts, particularly the specialty trades, there are no formal apprenticeship programs, but less structured on-the-job training programs, instead. These specialty trades include heating and air conditioning mechanics, carpet layers, pre-built cabinet installers, and a variety of others. In some cases, especially with heating and air conditioning, the manufacturer may provide a period of training. Again, these specialty trades may or may not be union affiliated. In some very rare instances, some licensing may be required. Even more rare, some state vocational funding may be provided for training. Primarily, however, the trainee hires on as a helper and learns the trade by working alongside the mechanic. Usually, no specified length of time is required for working as a trainee or helper. Trainees become mechanics when they can do the work on their own. Ultimately, however, the end result is the same: trainees, just as apprentices, become full-fledged mechanics in their trades.

B. CONSTRUCTION WORKER OCCUPATIONS. On any construction project, as in any building trades shop, there are many routine, day to day tasks which are essential to job completion, but which require no high degree of special skill. Tools, materials, and safety equipment must be kept reasonably clean and orderly. Water cans must be kept chilled and filled. Some routine equipment maintenance must be performed. Used materials must be cleaned and salvaged. Often, soil must be excavated or shaped with hand tools. All these tasks must be performed regularly and satisfactorily, both for employee safety and health, as well as for progress on the job. These are all tasks which require performance by highly responsible workers who usually do not have highly developed craft skills but who can follow instructions, and who can derive personal satisfaction from their jobs. Whether these tasks are being performed on a construction site, or in a building trades program, they are no less important to work progress and completion. Yet, the mechanic, or the potential mechanic—any person who has an affinity for highly skilled work—chafes under such routine, mundane work. On the other hand, persons without latent dexterity skills would despair poring over the intricate detail of a construction mechanic's job. At the same time, these persons seem to be inately disposed toward taking care of the secondary details. Thus, for purposes of individual job satisfaction, as well as for work completion, the semi-skilled and unskilled workers fill important jobs in the construction industry. Analytically, though there may be no clearly-defined distinctions between construction worker occupations, the jobs do fall into two different categories: (1) construction laborers, and (2) mechanics' helpers.

1. The Construction Laborer. Entry level employment for the semi-skilled or unskilled construction worker is often that of a construction laborer. Most of the time, the construction laborer's work would defy a job description. Mostly, the laborer carries out instructions or direction, given one at a time, by a labor supervisor, or in some cases, a mechanic, mechanic's supervisor, or project superintendent. Often, laborers work in crews, with a supervisor in charge, performing large blocks of work, usually preparatory for work to be done by mechanics. Sometimes, a laborer might be assigned to work alone on some mopping-up task after the mechanics have finished their work. In common practice, many laborers have developed their jobs into secure employment of a more or less permanent nature, simply by loyalty, dependability, and a thorough

knowledge of the operational peculiarities of their employers. Even though wages for laborers are lower than for mechanics, this is not always the primary consideration. Mechanics will have to move on and find other work on a more regular basis, while laborers will be kept on to perform work which does not require a mechanic's skill, this simply because the laborers' wages are lower. Tools, materials, equipment, vehicles, and job shacks have to be moved from one building site to another. Signs and barricades have to be erected and taken down again. Existing structures have to be demolished and debris hauled away. Job sites have to be dewatered after rains. Completed projects have to be cleaned and prepared for final inspections. These and countless other tasks, none of which requires a mechanic's skill, provide an endless source of coustant employment for construction laborers. Although these tasks require no great degree of skill, they require considerable responsibility, and all are available for workers who are willing to work, to show up for work regularly and on time, and to give a day's work for a day's pay every day.

2. *The Mechanic's Helper.* In the construction industry, the mechanic uses tools and materials to perform some highly skilled task toward the completion of the project, the mechanic's helper assists the mechanic, in whatever way necessary, to complete the task. Construction work, by its very nature, is primarily a four-handed occupation. Few skilled tasks on a construction job can be performed safely and expertly without assistance. No matter what the mechanic's particular craft, there are eight steps in each craft task which identify the mechanic's work, which only the mechanic can do as skillfully as necessary, usually with the assistance of a helper, and which are so similar as to be virtually identical for all crafts. These eight steps are:

(1) measure
(2) mark
(3) square
(4) scribe
(5) cut
(6) assemble
(7) align
(8) fasten.

To be sure, mechanics in the various crafts may use different types of tools, materials, and methods to accomplish these similar tasks in their particular work. Measurements may be linear, liquid, solid, to the nearest foot, inch, thousandth of an inch, or even in the metric or some other measurement system. Marks and scribes may be made with a pencil, chalk, scratch awl, or whatever else the mechanic's degree of accuracy may require. Squaring and alignment may be horizontal, vertical, or both. Assembly may be two pieces or many. Fastening may be done with nails, screws, glue, or any other item or substance required by the work. And cutting may be done in too many ways to list. In any event, by whatever method, and in whatever craft, the steps are not only highly similar but also extremely intricate. And these steps, in most cases, cannot be accomplished sufficiently accurate without assistance. The mechanic's helper provides that assistance. Just as construction laborers come in before and after the mechanics to do necessary unskilled work, so the mechanic's helper works alongside the mechanic to perform semi-skilled tasks.

3. *Comparison and Contrasts of Laborers and Helpers.* If the mechanic were to be classified as a professional, the helper would classify as a paraprofessional, and laborer as support staff. If the helper is a semi-skilled worker, the

laborer is an unskilled worker. The laborer transports materials to the work site. The mechanic and helper incorporate the material into the job itself. The helper holds one end of the tape while the mechanic holds the other and marks the measurement. The helper holds one end of the chalk line while the mechanic holds the other and snaps the line. The laborer, in the meantime, prepares a location in which the mechanic and helper will assemble, align and fasten the finished work. The helper holds material while the mechanic cuts it. The laborer brings additional material. The mechanic determines what tools and materials will be needed; either helper, laborer, or both find, identify, and produce the tools or materials. The mechanic gives instructions; the helper and laborer follow these instructions. The helper and the laborer are not apprentice mechanics: thus, neither is being trained by the mechanic. Instead, both are full-fledged construction workers, both performing tasks already learned within their respective job descriptions. In some non-union settings, the helper, and even the laborer, might perform some of the simpler tasks generally regarded as a mechanic's work. Such would never be the case on a union job. The apprentice mechanic would perform the simpler tasks, often with the assistance of the helper, and sometimes, of the laborers. In all the skill crafts, helpers and laborers are essential to the mechanic's and apprentice's performance of the skill tasks. In the construction industry, the mechanic's helpers, along with construction laborers, make up a considerable force of workers. The semi-skilled and unskilled occupations provide work opportunities for many workers who do not have the inherent dexterity to become skilled mechanics. Certainly, there should be room in a building trades program to train students, handicapped and otherwise, to fill these jobs.

II. PREREQUISITES AND OBJECTIVES FOR EXCEPTIONAL STUDENTS.

Even though it might be possible for almost any person to be taught almost anything, given enough time, effort, and resources, only limited amounts of each are available in a regular building trades program. Any modification of such a program must not, in any way, take anything away from the regular instructions and training. Thus, the parallel modification of the program must be just that--an extension of the program which provides optimum learning for handicapped, in the time frame allotted to regulars in the regular program. From the beginning, projected outcomes for regulars and handicapped should not be the same. Any other approach would result in something other than a building trades program--other than vocational education. In such a program, progress would be too slow to serve the needs of regular students. And this must not be allowed to occur. Logically, then, prerequisites and objectives for regular students should not be lowered. Instead, parallel, modified prerequisites and objectives should be established to accommodate handicapped. By that same logic, neither should success for handicapped be measured by success for regulars. Only with two parallel sets of prerequisites and objectives can the ideal of a program modified to include handicapped be realized.

A. PREREQUISITES FOR HANDICAPPED. The key aspects for identifying suitable handicapped students as recruits for a modified building trades program are: (1) that they should come from among those handicapped who have been mainstreamed; and (2) that they have no psychological, physiological, or sociological conditions which would render them unsuitable or unlikely prospects for success in the construction industry. The first key aspect, in itself, is indicative that these students have already had some measure of success in moving back toward the norm for regular students. In line with the second key aspect, whatever disabilities these students may have are not so severe as to render normal expectations for life totally impossible. In view of the broad range of occupational opportunities available in the construction industry, normal health, average physical strength, and good social skills are far more important, for many jobs, than high levels of technical skills or knowledge. In fact, without good health, strength, and sociability, technical skill and knowledge would not be enough for any person to survive in any construction occupation. Thus, no harm should come to the regular program, simply because parallel prerequisites have been established to include handicapped. Such parallel modification would only establish minimum requirements for minimum success, with any larger success a bonus for those individual handicapped who are able to achieve at higher levels. For, at the same time, nothing about modified prerequisites would prevent handicapped from participating in the program at any level individual abilities would allow. In the development of prerequisites for handicapped in a modified building trades program, each prerequisite should parallel a similar accompanying prerequisite for regulars. Prerequisites for both handicapped and regulars will fall into four categories: (1) social skills; (2) physical/sensory skills; (3) language skills; (4) computational skills.

1. Prerequisite Social Skills for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Attend school regularly and punctually.	a. Demonstrate regard for regular and punctual school attendance.
b. Work without supervision.	b. Work with supervision.
c. Respect the worth of school property.	c. Respect the worth of school property.
d. Exhibit appropriate behavior in the classroom and laboratory.	d. Exhibit near-appropriate behavior in the classroom and laboratory.
e. Exhibit exemplary behavior on field trips.	e. Exhibit appropriate behavior on field trips.
f. Follow instructions willingly.	f. Demonstrate ability to follow instructions willingly.
g. Accept constructive criticism.	g. Demonstrate ability to accept constructive criticism.
h. Display wholesome relationships with fellow students.	h. Display capacity for wholesome relationships with fellow students.
i. Work independently.	i. Work in a group.
j. Have a neat personal appearance.	j. Have a concern for a neat personal appearance.

2. Prerequisite Physical/Sensory Skills for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Perform heavy work (lifting 100 lbs. maximum and frequent carrying of objects up to 50 lbs.)	a. Perform heavy work (lifting 100 lbs. maximum and frequent carrying of objects up to 50 lbs.)
b. Climb and balance (ascending and descending ladders, stairs, ramps).	b. Climb and balance (ascending and descending ladders, stairs, ramps).
c. Have clarity of vision at 0 to more than 20 feet, with glasses, if required.	c. Have clarity of vision at 0 to more than 20 feet, with glasses, if required.
d. Have depth perception (three dimensional vision), or exhibit compensating rehabilitation.	d. Have depth perception (three dimensional vision), or exhibit compensating rehabilitation.
e. Identify and distinguish colors (not totally color blind) to the extent safety and work require.	e. Identify and distinguish colors (not totally color blind) to the extent safety requires.
f. Hear conversational speech, with hearing aid, if necessary.	f. Hear conversational speech, with hearing aid, if necessary.
g. Exhibit above average or manual dexterity and mechanical aptitude.	g. Exhibit average or normal manual dexterity and mechanical aptitude.
h. Have normal resistance to respiratory ailments and allergic reactions.	h. Have normal resistance to respiratory ailments and allergic reactions.

3. Prerequisite Language Skills for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Comprehend upper junior high school textbooks.	a. Comprehend upper elementary school textbooks.
b. Use reference materials, as needed.	b. Comprehend teacher-written or tape and oral tests.
c. Write meaningful notes over class material.	c. Comprehend oral instructions and information presented by the teacher.
d. Write meaningful responses to teacher-composed or textbook composed activities or tests.	d. Write meaningful responses or tape responses to teacher-composed activities or tests.
e. Write meaningful and conventionally accepted communications to others	e. Write simple communications of an informal nature to others outside

outside of the school setting (letters, documents, reports).	of the school setting (personal letters, mail order forms, other forms).
f. Speak in conventionally accepted language to adults outside of the school setting.	f. Speak to individuals and groups of peer associates in language which is not offensive for the setting.
g. Be able to alphabetize files, records, etc.	g. Use a dictionary to identify unfamiliar words.
h. Follow oral directions of greater than three commands.	h. Follow oral directions of three commands or less.

4. Prerequisite Computational Skills for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Read and write numbers greater than 1000.	a. Read and write numbers through 1000.
b. Add numbers with three or more digits.	b. Add numbers with less than three digits.
c. Subtract numbers with three or more digits.	c. Subtract numbers with less than three digits.
d. Multiply numbers with two or more places.	d. Multiply numbers with less than two places. Can use hand held calculator.
e. Divide numbers with two or more places.	e. Divide numbers with less than two places. Can use hand held calculator.
f. Use fractions, mixed numbers, decimals, percentages, and ratios in computations and problem solving.	f. Identify or read fractions, mixed numbers, decimals, and percentages, and solve very basic problems. Can use hand held calculator.
g. Solve problems related to clock hours.	g. Tell time to the nearest minute.
h. Solve problems involving money.	h. Recognize the value of coins up to \$1.00: solve very basic problems.

5. Prerequisites, Objectives and Specialized Skills. Once it has been determined just what instruction is going to be provided, and what terminal outcomes are projected for completers, whatever prerequisites are established become the specialized skills for attaining course objectives. In other words, it should not be necessary for students to identify course tools, equipment, materials, or supplies to attain course objectives. Neither should it be necessary for stu-

dents to have any of the hand skills or to know any of the technical knowledge of the course in order to be successful. In some cases, some courses, both scholastic and occupational, may require former completion of a more basic, similar course before enrollment. This should not be the case in a building trades program. Certain social, physical/sensory, language, and computational skills are all that are necessary for success. Of course, where the program has been modified to include handicapped, two sets of prerequisites and objectives are required. But in either case, the basic prerequisite of previous experience and learning, together with the proper psychomotor abilities constitute a sufficient basis for enrollment.

Where parallel prerequisites and objectives are established, and where students are simultaneously enrolled in other courses, terminal objectives in all prerequisite areas should be directed toward improved outcomes. For example, students may enroll in a building trades course as early as the tenth grade, and remain enrolled for two entire school years. The program vocational training plus regular scholastic success and normal social maturation should produce a vastly improved individual. Also, where parallel modification of the program is involved, prerequisites for regular students provide a starting point to establish objectives for handicapped students. Again, the value of success in other courses, and increased social experience cannot be over-estimated for either regulars or handicapped in their attainment of program objectives. To be sure, regulars and handicapped may, and probably will, come out at different points as course completers. But this is the very basis of parallel program modification. If handicapped come out about where regulars start out, the modification will have served its intended purpose.

B. OBJECTIVES FOR HANDICAPPED. Obviously, the primary objective for handicapped students is identical with that of regular students in a building trades program: that their involvement in vocational education would enrich and enlarge every aspect of their personal lives. Beyond that ideal, a secondary objective would be that each handicapped receive the training and develop the skills necessary for obtaining a job—any job—in the construction industry. Just as with regulars, the extent to which handicapped achieve these objectives will vary with individual abilities. Of course, with handicapped, objectives for measuring success should not be the same as for regulars. And just as with prerequisites, objectives for handicapped should be such as they can attain in the same time frame as regulars need to attain their objectives. Again, this is a case of parallel modification. For each terminal objective in each task assigned a regular student, there should be a parallel assisting task and accompanying modified objective for a handicapped student. Such is the nature of construction work. The mechanic identifies and uses tools and materials in performing construction skills; the worker identifies and handles tools and materials in assisting the mechanic to perform the skills. Regular students might not need any preparatory training to obtain such assisting jobs, indeed, might not even want such jobs. Handicapped might not only need such training but also want the jobs. In time, some handicapped might even move on into skilled crafts, but probably not in the same time frame as regulars. In the meantime, handicapped will have achieved objectives which make them employable, productive members of society. And they will have accomplished this through successful participation, at whatever level personally possible, in a building trades program modified to meet their needs, yet, without detriment to the program for regular students. In the development of objectives for handicapped in a modified building trades program, some objectives will be quite general, some very specific, all with similar accompanying objectives for regulars.

1. General Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Course Objective. The student will be able to develop social, academic, and occupational skills for a full, complete, and satisfying life, within the limits of personal characteristics, capacities, and capabilities.	a. Course Objective. The student will be able to develop social, academic, and occupational skills for a full, complete, and satisfying life, within the limits of personal characteristics, capacities, and capabilities.
b. Program Objective. The student will be able to develop basic occupational skills necessary for employment at an entry level job in the construction industry as a future construction mechanic.	b. Program Objective. The student will be able to develop basic occupational skills necessary for entry level employment in the construction industry as a trainee semi-skilled or unskilled construction worker.
c. Project Objective. The student will be able to perform a variety of of skill tasks necessary for the construction of a single-family dwelling, by following directions, as instructed.	c. Project Objective. The student will be able to assist in the performance of skill tasks necessary for the construction of a single-family dwelling by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.
d. Shop Objective. The student will be able to demonstrate comprehension of the general fundamentals of industrial safety, production, tool use and care, material use and conservation, and the work chain of command.	d. Shop Objective. The student will be able to demonstrate comprehension of the general fundamentals of industrial safety, production assistance, tool care and storage, work, and storage area cleanup, and the work chain of command.
e. Classroom Objective. The student will be able to demonstrate comprehension of proper social attitudes toward school, work, and community; of general information concerning the larger world; of technical information concerning the construction industry; and of verbal and computational skills at the upper high school level.	e. Classroom Objective. The student will be able to demonstrate comprehension of proper social attitudes toward school, work, and community; of general information concerning the larger world; of technical information concerning the construction industry; and of verbal and computational skills at a social survival level.

2. Specific Objectives for Regular and Handicapped Students. In the development of objectives of handicapped in a modified building trades program, each objective should parallel a similar accompanying objective for regulars. Objectives for both regulars and handicapped fall into five categories: (1) social skills; (2) physical/sensory skills; (3) language skills; (4) computational skills; (5) specialized skills.

(1). Social Skills Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Equate regular and punctual school attendance with regular and punctual work attendance.	a. Attend school regularly and punctually; recognize overall value of promptness.
b. Exhibit basic supervisory skills.	b. Work with minimal supervision.
c. Exhibit exemplary behavior in the classroom, the laboratory, and on field trips.	c. Exhibit appropriate behavior in the classroom, the laboratory, and on field trips.
d. Exhibit basic skills for giving simple directions.	d. Follow instructions willingly.
e. Exhibit ability to offer constructive criticism.	e. Accept constructive criticism.
f. Display qualities of leadership in relationships with fellow students.	f. Display wholesome relationships with fellow students.
g. Initiate work independently.	g. Work independently.
h. Have a mature, responsible personal appearance.	h. Have a neat personal appearance.
i. Show a concern for safety.	i. Show a concern for safety.
j. Exhibit awareness of the environmental relationship between personal choices and mistakes and social consequences and penalties.	j. Exhibit awareness of the environmental relationship between personal choices and mistakes and social consequences and penalties.
k. Demonstrate the desire for the recognition and reward which come only through success in an endeavor deemed socially worthwhile by significant others.	k. Demonstrate the desire for the recognition and reward which come only through success in an endeavor deemed socially worthwhile by significant others.
l. Display commitment to social duties and obligations with regard to citizenship, civic responsibility, neighborliness, and home and family.	l. Display commitment to social duties and obligations with regard to citizenship, civic responsibility, neighborliness, and home and family.

(2). Physical/Sensory Skills Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Increase physical strength, endurance, and stamina through regular involvement in the project work.	a. Increase physical strength, endurance, and stamina through regular involvement in the project work.

b. Improve balance, equilibrium, alertness, and agility through regular involvement in the project work.	b. Improve balance, equilibrium, alertness, and agility through regular involvement in the project work.
c. Train eyesight and hearing for more environmental awareness by watching and listening, while involved in the project work.	c. Train eyesight and hearing for more environmental awareness by watching and listening, while involved in the project work.
d. Develop manual dexterity and mechanical aptitude to a fuller potential through performance of project tasks.	d. Develop manual dexterity and mechanical aptitude to a fuller potential through performance of project tasks.
e. Improve overall health and physical well-being through regular exposure to the outdoor project atmosphere.	e. Improve overall health and physical well-being through regular exposure to the outdoor project atmosphere.

(3). Language Skills Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Comprehend middle to upper level high school textbooks.	a. Comprehend upper level junior high to lower level high school textbooks.
b. Comprehend signs, labels, instructions, and technical information throughout the classroom and laboratory.	b. Comprehend signs, labels, and instructions throughout the classroom and laboratory.
c. Exhibit highly skilled research techniques.	c. Use reference materials, as needed.
d. Develop charts and outlines of textbook, reference and research material.	d. Write meaningful notes over class material. May need a tape or handout for handicapped.
e. Write carefully and skillfully developed essays and thems, as well as use technical terms and vocabulary with the authority of familiarity.	e. Write meaningful responses to teacher-composed or textbook composed activities or test. May need oral responses to oral tests or taped responses to taped test.
f. Write meaningful, conventional and formal communications to others outside the school setting (business letters, job applications, resumes, etc.).	f. Write meaningful and conventionally accepted communications to others outside of the school setting (letters, documents, reports). Simple communications.
g. Speak in conventionally accepted language to adults in formal settings outside the school setting.	g. Speak in conventionally accepted language to adults outside of the school setting.

h. Be able to develop a basic system of files and records.	h. Be able to alphabetize files, records, etc.
i. Give oral directions in clear, precise, inoffensive language.	i. Follow oral directions of greater than three commands.

(4). Computational Skills Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Read, write, and use numbers greater than 1,000.	a. Read and write numbers greater than 1,000.
b. Add any amount of numbers with any amount of digits.	b. Add three or less numbers with five or less digits or may use a hand calculator.
c. Subtract numbers with any amount of digits.	c. Subtract numbers with five or less digits or may use a hand calculator.
d. Multiply numbers with any amount of places.	d. Multiply numbers with four or less places or may use a hand calculator.
e. Divide numbers with any amount of places.	e. Divide numbers with four or less places or may use a hand calculator.
f. Use fractions, mixed numbers decimals, percentages, and ratios to solve construction related math problems, such as linear measurements, surface areas, solid volumes, time and material quantities and cost, etc.	f. Use some fractions, mixed numbers, decimals, and percentages to solve social survival related math problems, such as hours, wages, interest, bank balance, invoice tallies, etc. or may use a hand calculator.

(5). Specialized Skills Objectives for Regular and Handicapped Students.

REGULAR STUDENTS	HANDICAPPED STUDENTS
a. Be able to perform a variety of skill tasks necessary to project completion of:	a. Be able to assist in the performance of skill tasks necessary to project completion of:
MAJOR BLOCK I. Construct a Concrete Foundation.	MAJOR BLOCK I. Construct a Concrete Foundation.
MAJOR BLOCK II. Construct the Walls and Partitions.	MAJOR BLOCK II. Construct the Walls and Partitions.
MAJOR BLOCK III. Construct the Roof.	MAJOR BLOCK III. Construct the Roof.
MAJOR BLOCK IV. Install the Finish.	MAJOR BLOCK IV. Install the Finish.

b. Be able to perform a variety of skill tasks necessary to completion of each Job in each Minor Block of each Major Block of the Project, by performing task details involving construction tools and materials, and revolving around eight task detail steps:

1) Measure Materials
2) Mark Materials
3) Square Mark for Cut Line
4) Scribe or Chalk Cut Line
5) Cut Materials
6) Assemble Materials
7) Align Materials
8) Fasten Materials

b. Be able to assist in the performance of a variety of skill tasks necessary to completion of each Job in each Minor Block of each Major Block of the Project, by performing a variety of semiskilled and unskilled tasks, details and steps:

1) Assist in Measurement
2) Assist in Marking
3) Assist in Squaring
4) Assist in Scribing or Chalking
5) Assist in Cutting
6) Assist in Assembling
7) Assist in Alignment
8) Assist in Fastening

C. PREREQUISITES, OBJECTIVES, AND SPECIFIC AREAS OF INSTRUCTION. Quite obviously, any legitimate prerequisite relates directly to some objective, just as any authentic objective relates to some specific area of course instruction. Implicity, the prerequisite requires: Before enrollment in the course, the student must be able to . . . . Explicitly, the objective delineates: Upon completion of the course, the student will be able to . . . . The subject matter of course instruction provides the impetus to move the student from prerequisite satisfaction to objective attainment. Where objectives are concerned, instructional development turns general, projected outcomes into specific, injected realities. Where instructional development is concerned, teaching and learning apply daily steps and details to the sequential achievement of the larger tasks and jobs. Thus, ultimately, if prerequisites, objectives, and instruction have been properly established and/or developed, students move along an orderly path to the larger light at the end of the journey. For the sake of clarity, it might be well if objectives are regarded in broad, general terms as terminals for the entire course. At the same time, without some specific, shortterm objective, terminal student success is not possible. These interim objectives could be divided into two subgroups: job goals and task aims. Goals could be intervals for evaluation along the way, while aims could be daily projected outcomes. Prerequisites and objectives, then are somewhat preliminary to all but the most general outlines of instructional development. Goals and aims, on the other hand, are integral to the specific areas of instruction.

THREE: PREPARATORY INSTRUCTIONAL DEVELOPMENT

In the development of parallel preparatory instruction is a building trades program modified to include mainstreamed handicapped students, some general observations are necessary, along with specific concerns for areas of instruction. As already noted, whatever is provided for handicapped should in no way compromise the integrity of vocational instruction and training for regulars.

At the same time, neither should handicapped be recruited for a program where no special vocational provisions are made for them. This means, then, that careful attention must be given to development of both a properly modified program and a correctly outlined curriculum. Thus, along with instructional concerns, general observations are needed. For before any authentic vocational instruction can be developed, especially parallel instruction for a modified program, a clear concept of a legitimate vocational program is essential. Hence, the two vital elements of preparatory instructional development: (1) general observations of program modification, and (2) specific areas of parallel instruction.

I. GENERAL OBSERVATIONS OF PROGRAM MODIFICATION.

Just as the recruitment of handicapped should not adversely affect the program for regulars, and the program should not include handicapped unless properly modified, so should not only all students benefit from the program but also the program should benefit from all students. This principle can be realized only if the program is singular and complete, not fragmented or incomplete. Handicapped should not detract from the program; they should complement it. Opportunities for regulars should not be diminished by the inclusion of handicapped, but augmented. The same should be true for handicapped. They should benefit more by being enrolled with regulars than by a program for handicapped only. In fact, a program for handicapped only would not be a legitimate building trades course. Instead, a contruction program for only handicapped would more closely resemble CVAE or VEW construction course. Also, in a full building trades unit, the program consists of two sessions daily, one session for each of two separate groups on students. If course objectives are to be achieved, each group should be a mixture of handicapped and regulars, not one group of handicapped and one of regulars. Such an arrangement would be more like a half unit of building trades and a half unit of CVAE or VEH construction trades. The purpose for a modified program is enhancement by involving handicapped. This purpose can be actualized only if handicapped and regulars are enrolled side by side. And the enhancement should be for both handicapped and regulars, as well as by both groups of students.

A. PROGRAM ENHANCEMENT FOR AND BY HANDICAPPED. Handicapped students enrolled in a modified program, and involved in a parallel curriculum, should both benefit/and be a benefit to/the program. First of all, they will benefit by being able to participate in the program at whatever level personal and individual abilities allow. By being enrolled alongside regular students, they can absorb as much of the regular instruction as individual capacities permit. Also, the stronger regular students can serve as models which should provide incentive for the handicapped. Second, handicapped will benefit the program by performing the routine tasks essential to carrying on the program; but not, essentially, skills training or instruction. This arrangement should free regulars for additional skills practice and drill. And third, the inclusion of handicapped rounds out the program by creating a work-simulation environment more nearly like that of the construction industry. In such an environment, both handicapped and regulars can more fully grasp what their working lives and occupations will be like in a real construction setting. Thus, handicapped contribute as much as they receive by their participation in a modified program where parallel instruction makes their success possible. Also, not only handicapped but also regulars benefit from such parallel modification.

B. PARALLEL MODIFICATION ENHANCEMENT FOR REGULARS. Just as handicapped students will benefit, to some degree, from the regular, as well as from the parallel instruction, so will some regulars benefit, to some degree, from the parallel as well as from the regular instruction. For in reality, not all regular building trades students have strong social and scholastic skills. In fact, many building trades teachers would attest that many or most building trades students are weak in social and scholastic areas. Thus, when the regular and parallel curricula are presented simultaneously, the weaker regulars could very well discover points where they can plug in and upgrade abilities where they are deficient. While skill tasks and semi-skilled and unskilled assignments may balance out very well in shop or project work, without any real effort on the part of the teacher to effect this balance, the same is true in the classroom, only if the teacher maintains such a balance. Whence, any lesson presented, particularly in the classroom, must be a balanced lesson of regular and parallel components. Also, quizzes, tests, and exams should contain a sufficient amount of parallel material to provide successful participation by all students, both handicapped and regular. Weaker regular students also will find lesson and evaluation success in such a regular and parallel instructional balance. Therefore, utilization of parallel modification will enhance a building trades process for any or all students, in any or all courses, depends entirely upon how comprehensively the various components of the course are brought together in specific areas of instruction.

II. SPECIFIC AREAS OF PARALLEL INSTRUCTION.

For whatever reasons, whether handicapped students' deficiencies stem from home and family problems, learning disabilities, emotional disturbances, physical handicaps, or cultural privations, all have one major problem in common: They have a serious lack of personal structure which is clearly reflected in their social, scholastic, and occupational achievements. They lack self discipline and personal commitment. They are not able to predict probable outcomes, because they do not understand the inter-relationships of the natural and social environment in which they live. Therefore, along with academic instruction and occupational training,they need more than the average amount of information about the natural, social, economic, political.and industrial world around them. A good place to start is at the school. For some reasons, handicapped seem to have the same idea, only more exaggerated, as a lot of other students: that school bears no resemblance to, or has nothing to do with, anything else on earth. However, if this is really true, then schools ought to be closed down immediately. School, more than any other institution, is a microcosm of all that the community regards as the best of its heritage, its culture, its knowledge and wisdom, and its values and beliefs. School is the repository of the best hopes, dreams, and ambitions of parents in the community for their own children and the children of their neighbors. No other institution in society is a better model of the democratic progress. Yet, handicapped—and others—seem not to have grasped this concept. No matter that, almost without exception, individuals who have excelled, in whatever field of endeavor, have, first of all, excelled in school. No teacher will ever have any success with any student, handicapped or otherwise, until that student is brought to a personal commitment to school itself. Then, from that point, instruction and training for that student can be launched in practically any direction. For handicapped, that direction should encompass all areas of human knowing, doing and being.

In the parallel instruction for handicapped students in a modified building trades program, the scope of the curriculum should be comprehensive. For no matter how technically skillful either handicapped or regular students may become, they cannot achieve their fullest individual potential until they understand and accept the kind of world in which they live. This instruction must include: (1) social skills; (2) verbal skills; (3) computational skills; (4) specialized skills.

A. SOCIAL SKILLS INSTRUCTION. For most handicapped students, and even some regulars, in a building trades program, assistance in developing strong social skills could very well be more valuable than their instruction in scholastic competencies or their training in shop skills. Lack of personal structure and discipline may be more detrimental to their social survival than any deficiencies in academic or vocational areas of learning and doing. Most employers readily affirm that if students can be taught to show up for work regularly and punctually, to be willing to work after they arrive, to follow directions, carry out instructions, and accept criticism, the employers are ready, able, and willing to train them for the jobs they are hired to do. If this is a correct analysis, then the vocational shop should approximate, as nearly as possible, a microcosm of a real job environment. And the emphasis here is on environment.

In any given set of environmental circumstances, some species become extinct, some survive, and others thrive. This is true whether it be a matter of natural survival in a jungle or thriving socially in a civilized human culture. In the work environment, workers become extinct in that particular setting when their jobs are terminated. Others survive if they are able to keep their jobs. Still others thrive in the same environmental setting when they move up and ahead to better paying, more substantially secure jobs. And documented statistics of industrial research show beyond question that as many as 90% of job terminations result, not from inadequate work skills, but from personal inability to get along socially with peers, superiors, and subordinates. All these indicators show the imperative need for a strong social skills development program in any vocational course. For in order for workers to survive and thrive in the work environment, they must know how to coexist with others in that social setting. And handicapped students in a building trades program, there preparing to enter the job market, make this need even more essential.

There are at least three essentials in a social skills development program for handicapped. These three elements, and perhaps others, should be structured to interact environmentally. That is to say, these elements should determine whether or not individual students, both handicapped and regular, become extinct, survive, or thrive in the building trades program. In all aspects of the larger social environment, some people make it, and others do not. In all areas of social interaction, success or failure depends largely upon how socially adept individuals are in any given setting. The three essential elements of social skills instruction are: (1) a distinctly described token economy system; (2) a highly structured plan of discipline; (3) a clearly defined distinction between success and failure.

1. An Environmental System of Token Economy. Just as one of the most important elements in any social environment is the system of economy, so is a token economy system no less important to the work-simulation environment of a vocational program. And this is particularly true in working with handicapped students in a pre-employment laboratory course. At the same time, regular students, also, will identify very quickly with an economy system of tokens which has value to them. Tokens may be as simple or as elaborate as the teacher finds convenient. The main thing is that the system be highly visible and integrally essential to student success in the program. Probably, a wall chart showing daily earning and expenditures of numerical points works as well as any.

In any event, for a token system to work, the tokens must have purchasing power for some items or commodities of value to students. Also, the tokens must be in reward for achievement, accomplishment, or attainment. Whatever system is used, if a wall chart is posted, other records should be kept by the teacher to avoid student tampering. Any token system should be comprehensive enough to serve the purpose, simple enough for students to understand, and convenient enough for the teacher to maintain without undue effort. Just as with dollars, record keeping should reflect both earnings and expenditures.

a. Token Earnings. If the token economy system is to be truly environmental, earnings must derive from the environment. Since a vocational program is a work-simulation environment, tokens should be earned by productive effort put forth in that setting. This means that tokens should be earned and awarded for each aspect of daily work, whether it be work in the classroom, shop, or on the field project. Briefly, the occupational aspects of vocational education can be described as the teaching of students how to get a job, keep a job, and get a raise. These three items can be used to structure some part of each day's instruction and training. And each item, in itself, teaches an important social skills lesson.

Item 1: Get a Job—A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify school policies pertaining to regular and punctual attendance, student dress code, and general daily preparedness with the highly similar elements of an interview for a job.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn what will be required from you each day before you get an assignment. If you don't get an assignment, you don't earn any tokens, and you won't get any grade. In other words, when you come to class each day, the first thing you will do is get interviewed for a job. If you fail to pass the interview, then, you will get no job. That's the way it works in the real world, and that's the way we're going to work also. For you to get a job, you will have to earn a certain number of tokens. From this lesson, you will learn how to earn those tokens.

Also, another important point you will learn is how much like a job interview coming to class is, and how much school rules are like the things an employer would look for in someone interviewing for a job.

So, pay attention; take notes, if you like. For you will be tested on this lesson later.

II. PRESENTATION: Student Information. To begin with, it will be possible for you to earn up to six tokens the first thing each day. Each token earned will be for some item you have, passed in the daily interview to get a job. But if you don't earn as many as four, you won't get a job that day. That means you will sit out the shop session and get an "F" for the day. Here is how you will earn your points to get a job:

A. BE PRESENT.

NOTE TO TEACHER: This lesson obviously hits only the high spots of a job interview. The real purpose here is to relate the interview to daily show-up for class. It ought to provide an outline for a more extensive lesson, if supplemented by books on the subject.

1. Anyone who does not show up for an interview will not get a job.

2. If you show up for class, you will earn 1 token, even if you don't do anything else.

3. But earning only 1 token won't get you a job. You will still get an "F."

B. BE ON TIME.

NOTE TO TEACHER: The method presented here in this lesson will work as well as it is enforced. Handicapped students, especially, tend to be rowdy and inattentive when first in class. This lesson will get them off to a good start. All the teacher has to do is spend a few more minutes at roll-check. If students have to sit out a few sessions and take an "F", they will get the message.

NOTE TO TEACHER Figure 1 shows a model for a daily check-off list to be used at roll-check, as well as throughout the class session. The list is divided into 3 sections: get a job, keep a job, and get a raise. Token values for each check-off item are shown. The values are based on a 3-period session. Also, there is a tally section for computing daily earnings and totals and balances. It should serve as a convenient method for checking students' conduct and performance each period of the session.

CHECKING METHOD: In the get a job section, students earn these tokens in the first few minutes of the session. No more tokens should be added here after work begins. In the keep a job section, students earn 0-1 token each period.

1. Anyone who is late for an interview would very likely not get a job.

a. If you come to class on time, you will earn another token.

b. But 2 tokens are not enough for you to get a job and earn a grade.

c. Being on time for this class means being in your seat, ready to go to work, when the tardy bell rings.

2. If you showed up late for an interview, the boss would figure that you would show up late for work, too.

a. Also, he would probably have better things to do than sit around and waitfor someone who is late for an appointment.

b. People who hire other people believe that time is very important.

c. And they probably won't hire someone who wastes time by being late.

3. So, you see, school is not the only place where you will be expected to show up on time.

a. But school is a good place to learn how to be some place on time and every day.

b. Remember, to be on time for this class, you have to be in your seat, ready for work, when the tardy bell rings.

C. BE ALERT

At the end of the session, tokens are totaled to determine the grade for the session. The get a raise tokens should not be used to determine grades. These are bonus points which go into the students' bank account for future use. Grades are determined from the get a job and keep a job sections. For a 3-period course, grade values and deductions are as follows:

GRADE	EARN	PAY
A	42-48	27
B	36-41	24
C	26-35	21
D	21-25	18
F	0-20	0

Even if the student earns an "F", earned tokens should be awarded. There is no grade deduction for an "F."

1. That means if you go for a job interview, the boss expects you to look at him eyeball to eyeball.

a. You wouldn't want to slouch down in your chair, or rear back and prop your feet on his desk, or sit with your back to the person interviewing you.

b. And you need to come to class and be alert the same way.

c. Sit facing the teacher, eyeball to eyeball, just as if you were interviewing for a job.

2. If you come class alert, you will earn another token. That will make 3, if you are present and on time.

a. But if you come to class and lay your head down and try to sleep, or sit with your back to me, you won't earn a point for being alert.

b. And even if you have earned 3 tokens by being present, by being on time, and by being alert, you will still need 1 more to get a job, and not get an "F" for the day.

D. BE COURTEOUS.

ABSENCES: Deduct 15 tokens from the student's bank account for each absence. For unexcused absences, students should be allowed to make up the work and deduction—if they request to make it up. Most students won't request to do so. If any do, points should be awarded, on their time, at about 0-21 tokens per hour, depending on their performance.

NOTE TO TEACHER: Students who do not get a job should be assigned to some area to sit out the class session. This area could be called the "WELFARE LINE." So long as they remain in that area, and cause no

1. That means have good manners; act like you're in school instead of a pool hall.

a. And it means don't talk when the teacher is talking; don't get up and move around the room without permission.

b. In other words, act the same way you would if you were trying to get a job.

2. Courtesy or good manners will earn you another token, that makes 4.

a. Remember, you have to have at least 4 tokens to get a job.

b. But there's one little catch; one

problems, the only penalty should be an "F" for the day. If they create problems, then other penalties or consequences should be exacted. Students in Welfare Line should not communicate with either the teacher, other students at work, or anyone else. The teacher should arrange for them to get water and go to the restroom during the Welfare Line assignment.

E. BE CLEAN.

NOTE TO TEACHER: Grades and conduct are report card items, and ought to be recorded daily in the grade book. In a work-simulation environment, there is no way to completely separate grades from conduct. Conduct grades should be computed daily, as follows:

EARN	GRADE	CONDUCT
42-48	A	S
36-41	B	S
31-35	C	S
26-30	C	N
23-25	D	N
21-22	D	U
0-20	F	U

No get a raise tokens for any grade below C/S should be awarded. A good rule here is, as follows:

F. BE PROPERLY DRESSED.

GET A RAISE BONUS TOKENS:

EARN	GRADE	BONUS
46-48	A/S	15

of the points has to be earned in a certain way.

c. You'll learn about that in a minute.

3. So, if you're in your seat, on time, facing the front, and showing some good manners, you've got yourself 4 tokens already.

1. That means, practice good hygiene.

a. Brush your teeth, take a bath every day, and use a little deodorant.

b. Comb your hair; try to look like you're trying to get a job.

2. If you went for a job interview, the boss would be looking for things like that.

a. You would try to look neat and clean to get a job.

b. Do the same for coming to school.

3. You can see that coming to class on time, showing good manners, and being nice to be near is no different than trying to get a job.

a. By doing these things: Being present, on time, alert, courteous, and clean, you will earn 5 tokens.

b. But there is one more you must earn before you get a job, whether you earn all the other tokens or not.

1. That's one thing the boss will look for every time: whether or not you're dressed right.

a. Now, you might not dress the same way for every kind of job you interview for.

42-45	A/S	12
39-41	B/S	10
36-38	B/S	8
33-35	C/S	6
31-32	C/S	4

TWO-PERIOD CLASSES: Some building trades class sessions may only two periods daily. For these all token values should be 2/3 of values shown.

NOTE TO TEACHER: In dealing with handicapped, consistency and structure are the keys to success. If they have to come to class and and earn the right to an assignment, they will do it; if not, they won't. A more positive outlook is the value of the daily drill and practice in job interview simulation. Instead of roll-check being down time for both teacher and students, class automatically begins on a productive note the instant the tardy bell rings. Teaching and learning begin before the teacher says a word. Any student who performs this ritual 180 times a year for 2 years ought to be ready for a job interview when the time comes.

b. But if you really want the job, you'll find out how you should dress, and that's what you'll do.

2. What would be the proper way to dress for school?

a. Wouldn't it be according to the school dress code?

b. Lots of students hate the dress code. But employers have them, too.

c. And so does every place else. So, why not at school, too?

3. So, if you're present, on time, alert, courteous, clean, and properly dressed you earn 6 tokens.

a. But even if you don't earn all the others, or even if you have 4 tokens without being dressed right, you still won't get a job.

b. That's because school policy says you have to meet the dress code before you can stay in class.

c. That means you have to earn any other 3 tokens, plus the dress code token, before you get a job in this class.

d. Otherwise, if you don't earn at least 4, and one of them the dress code token, you get an "F" for the day.

III. APPLICATION: Student Discussion.

A. Get students talking about job interviews:

1. Getting ready to go for the interview.
2. Talking with the prospective employer.
3. How job applicants would dress for different kinds of jobs.

B. Draw some comparisons between job interviews and how school policies set out similiar guidelines for student dress, conduct, etc.

1. Point out that this is a kind of teaching also: teaching student how to prepare for success in the real world.

2. Get students reactions to these comparisons.

C. Review specific points of lesson content, particularly how tokens may be earned to get a daily shop job, how many must be earned, which particular one must be earned, and what happens if they don't earn enough to get a job.

IV. SUMMARY: Student Reinforcement. Remember, now, next time you come to class, be ready to try to get a job. If you don't earn at least 4 out of 6 possible tokens, you don't get an assignment, you sit out the shop session, and you get an "F."

To get a job, you need to be present, be on time, be alert, be courteous, be clean, and be properly dressed. That is a total of 6 tokens. Out of those 6, you must earn at least 4. And 1 of those has to be the last—be properly dressed, according to the school dress code.

V. VERIFICATION: Student Evaluation. At the beginning of the next class session, while roll check is being taken, evaluate each student silently, taking note of whether or not the students have complied with the requirements for getting a job. Those who have passed the interview should be given daily assignments. Those who have not should be provided some safe place away from the day's activities. There, they should be required to sit, without causing any problems, until the end of the shop session. Their grade for the day should be recorded as an "F." At regular quiz, test, or exam times, material from this lesson should be part of content.

Item 2: Keep a Job—A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify the attendance, performance, and conduct aspects of daily classroom, shop, and field project activities with the conditions for obtaining and maintaining a job in the construction industry.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn what will be required of you each day to keep a job after you get one. If you don't get a job, you don't have to worry about keeping it. If you do have a job, then this lesson is important to you. In other words, just getting a daily assignment each day won't earn you enough tokens to get any grade but an "F." To get a passing grade, you have to earn it through the work you do after you get a job assignment.

Also, another important point in this lesson is how much like a real job a vocational shop is. That's because, in the shop, you learn the things you need to know to get and keep a job. And that's a lot more than just doing the work. Unless you work safely, you will get fired. If you can't get along with the boss, or with other workers, you can't keep your job. If you don't come to work on time every day, you will lose your job. Learning how to keep a job is what this lesson is about.

So, pay attention; take some notes if you want to. You will see some of this lesson later on a test.

II. PRESENTATION: Student Information. Besides the 6 tokens, more or less, that you earn by getting a job assignment each day, you can earn up to 57 more tokens by doing your job assignment. The more you do your work like you are a real job for pay, the more tokens you will earn, and the better your grade will be for that day. Here is how you will keep your job assignment, earn your tokens, and get your daily grade.

A. PRACTICE SAFETY FIRST, LAST, AND -----ALWAYS.

NOTE TO TEACHER: When working with handicapped, safety, as all else, is best taught by strict, consistent enforcement of safety rules. Usually handicapped don't accept any information until someone proves to them that it is true. Handicapped are highly unstructured, in most cases. They like to play. They like to make a picnic out of everything. For safety's sake, of course, this cannot be allowed in vocational education. Enforcement of safety, for handicapped, hinges on safety being mandatory for keeping their job. When they begin working unsafely, or playing around at all, warn them—unless the violation is too severe. If it is a minor violation, fire them instantly. Send them to Welfare Line, give them a F/U, and let them try again next day. They will get the message. Award them the points they earned up to the point where you fire them.

NOTE TO TEACHER: Where you establish the welfare line depends largely on how large your shop is,and how it is arranged. If there is a shop classroom, it will serve the purpose. If not, any place in the shop out of the way of working students will do. If the

1. There is no job anywhere you can keep if you don't work safely at all times.

a. Working safely means looking out for the safety of yourself and everybody else on the job.

b. Safety means you have learned and that you follow the program of safety where you work.

c. And it means that you do every job, use every tool, and handle all work materials according to the special safety rules for that work, tool, or material.

2. Playing on the job is a safety hazard; there is no job you can keep, if you play instead of work.

a. Playing around gets more people hurt at work, than working on the job.

b. And playing instead of working will get you fired from your job assignment in this class also.

c. If that happens, you will have to sit in Welfare Line and take an "F" for the shop period that day.

3. Working safely will earn you 6 tokens for the day.

a. That's twice as much as you will earn for anything else you do; so, it's really true that "safety pays."

offense occurs on the field project, let them sit on the bus, or somewhere on the project site out of the way. The main thing is that it not be allowed to become a time to sleep, rest, or play. Also, make sure there is no communication between working students and those in Welfare Line. If students in welfare line create even the slightest problem, lower the boom. Accelerate their situation to something severe. Students who persist in working unsafely and violating the terms of Welfare Line should soon be removed from the program permanently.

b. But working unsafely will cost you. It will get you fired from any job, and from this shop.

c. If you break some safety rule that is not very serious, you will get 1 warning; the next time, you will be fired.

d. That means you will have to sit out the rest of the shop period, and get an "F." That's the way it is on a real job, and that's the way it is in this shop.

4. So, if you want to keep your job anywhere, including this shop, learn how to work safely, then work that way.

B. SHOW UP PREPARED--BE READY TO GO TO WORK.

NOTE TO TEACHER: Low interest and short attention span are real problems for handicapped students. However, if they are going out into the construction industry, they have to learn to overcome these problems. It is not possible to help handicapped students—or any other student—by giving in to their deficiencies and weaknesses. No person is without some kind of problem involving sustained interest and attention. Some just have larger problems than others. For most of us, most of the time, we sustain interest and attention because of some incentive. Sometimes, incentive is not enough; that's where motivation comes in. At those times, we work, we listen, we sustain interest and attention because, if we don't, we lose our jobs. That's motivation. Incentive comes from our desire for reward and recognition. Motivation comes from our desire to avoid consequences and penalties. With handicapped, motivation often works better than incentive. Neither works for them until they know for sure that they are inevitable. Incentive fails because handicapped figure someone will give it to them

1. That means being interested in your job. You are not doing the boss a favor by coming to work.

a. Keeping a job, for most of us, is the difference between success and failure.

b. And being interested or not is the difference between keeping a job or losing it.

2. Your interest will earn you up to 3 tokens for the day. Interest will also help you keep your job assignment.

a. If you lose your interest, you lose your job.

b. If that happens, its back to the Welfare Line. You know what that means.

3. Being prepared also means paying attention. You might not can do your job if you don't listen while the boss tells you how.

a. In this shop, you need to pay attention to directions and instructions given you by the teacher.

whether or not they earn it. Motivation fails because they figure nobody will do anything about it. You have to prove them wrong in both cases. Welfare Line will do that.

b. If you ignore what your boss tells you, you can't keep your job; you get fired.

c. In this shop, if you ignore your teacher, you also get fired. And hello, Welfare Line.

d. Paying attention is also worth 3 points. So being prepared to work is worth a total of 6 points. Along with 6 for safety, that's 12, which is still not enough for a passing grade for the day.

C. HAVE A GOOD ATTITUDE--TOWARD YOUR JOB, YOUR BOSS, AND THE PEOPLE YOU WORK WITH.

NOTE TO TEACHER: Another severe difficulty in dealing with handicapped is helping them with their exaggerated hostility toward authority figures and their inclination toward extreme levels of peer conflict. All of us are afflicted, to some degree with the "them or us" syndrome. With handicapped, it's more a case of "them or me." Handicapped may even team up against some authority figure, but they can't keep their own act together long enough to hurt anyone but themselves. They gravitate toward too much conflict among themselves to sustain any effort to join in any disruptive activity. The important reality here is this: Except for parents, a few professional helpers, and maybe the handicapped, the rest of the world couldn't care less that the student has a problem. Employers, especially, are not looking for welfare cases to support; they are looking for people who can do a job well enough to keep it. For handicapped to be directed toward the world of work and stay there, they must undergo some serious attitudinal changes. They must learn respect for other people, for their rights, and for their authority. They must learn to be honest, with themselves, and in their dealings with other people. And they must learn that the world is not out to get the. Handicapped, more than

1. An important part of a good attitude is respect. Respect means cutting everybody a little slack. If you want other people to respect you, you have to respect them.

a. One kind of respect is for other people's rights. You want your rights to be respected, so you should respect the rights of others.

b. Another kind of respect is for their position or authority. All of of us sometimes resent people in places of authority--like policemen, teachers, and bosses. But you want your position respected; you are a student in school, and as such, you expect to be treated like a student.

c. And you should be respected as a student. But so should other people be respected for who and what they are also. You are here to do your job as a student. That deserves respect. But other people are here to do their jobs as teachers, principals, and counselors. Their positions deserve respect, too.

d. Respect is not the same as liking someone. You don't have to like a person to be respectful. You just have to recognize that the rest of us are human, too—that all of us are just trying to do the best we can, that all of us have certain rights, any other group of students, have, for years, had people standing in line trying to help them. They need to be made to see that. That is no easy job. And it is not a job that can be done by yielding to their inclinations to do battle with the world, to forever expect somebody to give them something, and to insist that they must abuse even those people who are trying to help them. Perhaps, the missing element, more than anything else, is the presence of trust. For sure, they don't trust the people who try to give them everything. But if they have to display healthy attitudes of respect and honesty for class success, they can learn to trust the inevitability of consequences and penalties for their mistakes, failures, and poor choices.

NOTE TO TEACHER: For too long handicapped have been the victims of well-meaning and misguided people trying to help. Handicapped are told they are not losers, then they are treated like losers. They don't trust anything or anybody because nobody has taught them how to trust themselves. They may not respect anybody or anything in their environment because they have not been taught how to respect themselves. They may try to cheat they system, because, inadvertently, the system has cheated them, and in advertently, the handicapped wind up cheating themselves. These observations are particularly true on handicapped whose deficiencies are not so severe as to prevent them from being mainstreamed.

Being mainstreamed is a vital crossroads in handicapped lives. They are at the point where, if they are ever going to become, independent, responsible, productive people, that is the time for teaching them how. Someone needs to come along who can trust them enough certain responsibilities, and certain positions and authority. Even when we don't like some people, we have to to respect them and let them do their job.

2. Another part of a good attitude is honesty. Honesty means several things: not being unfair, not cheating, not lying, and not stealing. Nobody likes to have anything to do with a cheater, a liar, or a thief. We don't like to be treated unfairly—to be cheated, lied to, or stolen from. Neither should we try to do other people that way, when we don't like it ourselves.

a. If we are honest, we tend to our business and let other people tend to to theirs. We are fair with them: we don't cheat them, lie to them, or steal from them.

b. And we are honest when we give a day's work for a day's pay, when we take care of our boss's property like it belong to us, and when we don't try to slide by, by letting other for ourselves.

3. A good attitude, then boils down to trust—trust in ourselves enough to be respectful to other people, their position,and their rights,and trust enough in ourselves to be honest and fair in our dealings with other people.

a. And when we have that kind of good attitude of trust in ourselves, then we learn how to trust other people to have respect for us and our rights, and to trust that they will be honest in their dealings with us and our property.

b. The time you put in in school or at work is your property. You deserve to be rewarded for your work. And if you don't get what you deserve, you are being cheated, treated unfairly, and stolen from.

to turn something important over to them, to make them responsible for it, and to make them accountable for their own conduct while they take charge of it. They need to be recognized as whole human beings who are not only worthy recipients of society's charity but also worthwhile participants in society itself. They need to receive the rewards of honest labor, the consequences of poor choices, and the penalties for mistakes, just like anyone else. They need to learn that even a civilized social environment provides no more than bare existence, perhaps even extinction, for those who cannot survive, perhaps even thrive, on their own. All this can happen for mainstreamed handicapped in a building trades program modified to provide parallel instruction and training for them.

Probably, the first lesson handicapped will learn in building trades is the hard lesson of Welfare Line. But, as hard as the lesson may seem, it is only a graphic simulation of what is a present reality for handicapped: They are already in Welfare Line; they just don't know it. It's time somebody brought it to their attention. Becoming aware of their situation, and being willing to do something about it is the only real hope they have.

D. BE PRODUCTIVE; TURN OUT AS MUCH GOOD WORK AS YOU CAN.

NOTE TO TEACHER: The handicapped students may work hard, fast and recklessly, or not at all. They could have an idea that if they can just get everything done right now, then they can take off for the rest of the period. Also, some of them find it difficult to relate shop work to school. These seem to think they are doing the work for their teacher, rather than for themselves. To them, school is a place where you

c. But if you come to school or go to work and try to get something for nothing, then it is you are being unfair, cheating, and stealing.

4. Just like anywhere else you might work, you can't keep your job assignment in this shop without a good attitude.

a. If you act respectfully and honestly, that will be worth 6 points—3 for respect and 3 for honesty.

b. If you act disrespectfully or dis- honestly, you will spend the rest of that shop class in Welfare Line.

c. To this point, if you earn 6 tokens for safety, 3 for interest, 3 for attention, 3 for respect, and 3 for honesty, that's a total of 18, which is still not enough for a daily passing grade. So you would still have a way to go before you put in a good day's work for a good day's pay to keep your job.

5. As important as working safely, being prepared, and having a good attitude are, until we do some real work, the other 3 are not enough for us to do to keep our job. Work production is important, too. And that involves a certain quantity of work of a certain quality. Unless we are willing to do that, we will never be able to keep a job.

1. Production means 2 things: quantity of work and quality of work. An old saying in the construction industry is: why is there never time to do it right, but always time to do it over? The real way to production is, of course, do it right the first time. And if work is done right, it turns out a certain quantity of quality products.

a. Work quantity means how much work is done. Quantity of work that should be done in a given period of time hinges on some other things as well.

work at a desk with books, paper, and pencil. Others feel like that they are working for the school and that the school ought to pay them. Still others feel like they are being made to do work that custodians and maids are being paid to do, and that the work is beneath them. Thus, many of them try to race through the work, without regard for quality, simply because the work has no meaning of personal satisfaction for them. Probably, some handicapped with these attitudes won't survive in the program. And they shouldn't. Unless the work is of some personal benefit to them, they are better served in some other program. Only those who benefit from and contribute to the program should be allowed to remain enrolled.

But dismissal from the program, for whatever reason, should not be confused with getting fired from the daily job assignment. This is a work-simulation exercise, and it is of a 1 shop session duration. Everyone starts over fresh the next day. Again, it is a simulation drill of a harsh reality of life. People do get fired off jobs. Better that students get a taste of what it's like in a simulation than in the real thing.

However, be fair in the roles you play with students. In the classroom, you are a teacher, enforcing rules for the kind of conduct required in any classroom. In the shop, you are an instructor, enforcing the kind of rules necessary for conduct appropriate for technical instruction. But on the field project, you are the boss, looking for those types of conduct which would interfere with a smooth-running construction operation. Handicapped, for the most part, can get into this kind of role play. It might even teach them how to keep a job.

b. Work should be done safely, and hurrying too fast is unsafe. So the worker should work at a safe rate of speed. Just staying busy is far more productive than hurry up and wait.

c. Working together as a team, which requires that workers get along, is another secret of production of a quantity of good work. So a good attitude is important to turning out a lot of work.

d. Planning out work is important also. This means being prepared before starting the job. So, workers have to be interested, and pay attention to the bosses instructions and directions. That's why being prepared for work is so important.

e. So safety, preparedness, and atti- tude all help workers turn out a good quantity of good work.

2. To be productive, workers need to turn out work of good quality. That means work that is well done. Doing work of good quality requires that workers train their natural aptitudes and abilities to do certain jobs. In other words, they turn aptitudes and abilities into skills for doing good work.

a. In this building trades class, we are training our aptitudes and abilities to turn them into skills. So, you need to do the best work you can every day.

b. Your production will earn you up to 9 tokens a day—3 for quantity, 3 for quality, and 3 for aptitude. With the 18 earned by safety, attitude, and preparedness, that's 27. 6 more for getting a job makes 33. That's worth a "C" for grade. But there are others you can earn for a better grade, and must earn to keep your job.

E. MAINTAIN SHOP FACILITIES.

NOTE TO TEACHERS. In shop maintenance task details, some will be more suited to regulars, some to handicapped. True maintenance of tools and equipment, and some of the more detailed custodial duties could be performed by regulars, while true cleanup, etc. could be performed by handicapped. For convenience, a block of 15 tokens should be made available to each student for shutting down the shop each day. Individual students should be paid in accordance to the efforts they put forth. Also, some interim cleanup for safety's sake should be performed throughout the shop session. Up to 5 tokens per period for shop maintenance should be awarded each student, again, based on individual effort.

At the end of the session, tally up tokens for the get a job and keep a job categories. Award grade and conduct from these tokens. Then, tally up the get a raise tokens. Add these to the student's bank account, as well as to each student of the week account. Use of tokens, other than for grades, will be more fully discussed under "Token Expenditures" in a later lesson plan.

The next social skills lesson will concern the get a raise section of the tally sheet.

1. Maintenance means doing several things, all of which help take care of facilities where you work.

a. First, tool and equipment care. This includes simple repairs under the teacher's supervision, cleaning, and lubrication. Worth 3 tokens daily.

b. Second, shop cleanup. Clean work and walk areas. Worth 3 tokens.

c. Third, tool storage. All hand tools in proper locations in tool rooms. Worth 3 tokens.

d. Next, building security. All shop and toolroom doors locked. 3 tokens.

e. Finally, material and energy conservation. All materials and supplies stored away; all lights out. 3 tokens.

2. All these different items together under safety, preparedness, attitude, and maintenance, plus [illegible] tokens for getting a job add up to 48 tokens. Anyone earning 48 tokens will get an "A" for the day.

a. But anyone earning 48 tokens will have to put in just about a perfect day's work.

b. Also, before you can earn that many tokens, you have to get a job. Then you have to keep your job after you get it. Otherwise, hello Welfare Line.

III. APPLICATION: Student Discussion.

A. Get students talking about how to keep a job:

1. Should employers have the right to tell employees how to dress?
2. What would you do if your paycheck was to much? Too little?
3. What does attitude have to do with keeping a job?

4. If you don't trust other people, does that mean you don't trust yourself? Trust yourself to do what?

B. Draw comparisons between getting fired from a real job and being placed in Welfare Line for the day.

1. Point out the role-simulation teaching in this arrangement.

2. Try to get students to react to the Welfare Line plan.

C. Review specific points of lesson content, particularly how tokens may be earned, and what students must do to keep their jobs and avoid Welfare Line.

1. Students must earn certain amounts of tokens to get certain grades.

2. Students must work safely, have a good attitude, be prepared to work, and perform certain shop maintenance tasks to earn their tokens, get their grades, and keep their jobs.

3. Those who lose their jobs go to Welfare Line for the rest of the shop session.

IV. SUMMARY: Student Reinforcement. Bear in mind, getting a job assignment is not enough; you have to keep it, before you get a passing grade. Work exactly like you would on a job for pay. Take care of your job by doing a good job.

For doing a good job, you will earn up to 42 tokens, plus the 6 for getting a job, for a total of up to 48. How many you actually earn depends on how well you do your job. If you don't do a good job, you will be fired for the day. That means you go to Welfare Line and get an "F."

V. VERIFICATION: Student Evaluation. The next class session after this lesson, put the keep a job method into force. Use the tally sheet to check student's performance throughout the session. Those who are not doing a good job, who do not heed reasonable warnings, should be fired, just a if they were on a real job. Let them sit out the shop session in Welfare Line.

At regular quiz, test, or exam intervals, material from this lesson should be part of the content.

Item 3: Get a Raise—A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify the success of extra effort in classroom, shop, and project job assignments with promotion and advancement in the work environment and with thriving socially in the larger community.

I. PREPARATION: Student Motivation. The most important point of this lesson is that you will learn how to do more than just get by in this course. First of all, you have to put forth some effort to get a job assignment. Then, you have to put forth more effort to keep your job assignment after you get it. But just like everything else in life, if you want to get the very most out of this course, you have to put forth some extra effort. In other words, you need to give it your best shot every day.

Another important point of this lesson is that you will learn that folks who get the most out of life are those who put the most into it. On a real job, for example, some people get regular raises and promotions right along. Others just get by from day to day. Then, others try to just slide by, and they wind up without any job at all. If you earn it, you can get a raise in this course every day. Learning how to get that raise is what this lesson is about.

So, pay attention, take notes if you wish. Later, you will be tested over the material in this lesson.

II. PRESENTATION: Student Information. Up to now, you have learned that you can earn up to six points by just coming to class ready to get a job. If you don't get as many as 4 of these points, you don't get an assignment that day, and you get an "F" for your daily grade. If you do get a job, you can earn up to 42 more points, depending how safely you work, how much good work you do, how you get along with everybody else, and if you help keep the shop clean and orderly. Besides these 48 tokens, you can earn up to 15 more, depending on how much extra effort you put in.

A. DEVELOP YOUR LEADERSHIP SKILLS.

NOTE TO TEACHER: In any building trades class, there will be those students who go far beyond rote, perfunctory performance of their daily job assignments. This will be true of both some regulars and some handicapped. These students need and deserve recognition and reward for their extra effort. In the case of handicapped, they may not be able to perform the skills assignments as well as the regulars, but they can do an excellent job of assisting in skills performance. And some handicapped will have outstanding leadership qualities. These are the qualities which form the basis for raises, promotions, and advancements on real jobs. Whether it be that regular student who can carry out personal assignments expertly, lend guidance to other students, or even help the teacher with some supervision, or whether it be the handicapped who makes that last round on personal initiative to make sure everything is cleaned up, put up, and locked up: both have leadership qualities which are valuable. Both will get raises and promotions when they enter the job

1. That means have a mind of your own. Just because other people you work with slack off or slide by doesn't mean you have to do that.

a. Some people are never going to get a raise. If you follow them around, neither will you. Be a leader instead. It will pay off, no matter what you're doing for a living. It will pay off in this course, too.

b. And some people are never even going to be able to keep a job. They not only are not good leaders but also are not good followers. They don't listen or pay attention to instructions or directions, so they do sloppy work. And they wind up getting fired. If you try to work like that, you might get fired, too. Also, if you try that kind of work in this course, it will get you fired for your job assignment. So, while you're learning how to be a good leader, at least be a good follower. Keep your job while you're trying to get a raise.

c. Then, some people never even get a job. Let alone keep a job, market, even though their job descriptions may be vastly different. Although there may be many ways to measure leadership, the one item is sufficient for scoring outstanding student--both regular and handicapped--day by day. Any vocational teacher knows when student leadership is at work, simply by the way the work goes each day. Those students who give it that little extra each day are deserving of that little extra recognition and reward the teacher gives them each day. Identifying leadership and pointing it out to all the students is an excellent motivator for giving incentive for leadership development in other students in the program, as well.

Remember, handicapped students in the program may be training for semi-skilled and unskilled jobs in construction; leadership qualities could determine how regularly they work. Construction laborers and mechanics' helpers are not necessarily highly skilled workers, but their jobs do require a lot of personal initiative and responsibility. Many times, these semi-skilled and unskilled workers work without a lot of immediate supervision. They need to know what to do and how to keep busy throughout the day. As a teacher of handicapped, you will help them greatly by giving them many opportunities to develop their potential for individual leadership. With handicapped, this will be no easy task. Often they will make you make them do their jobs, if you allow them to do so. However, if you fire them often enough for getting off-task, they will get the message.

or get a raise. So there's a lot of folks around to hang around with. You know who's trying to do a good job and who's not. Pick out those who are making out OK to be your friends. If you try to be like them, you'll make out OK, too.

2. Leadership involves two different things: how you deal with the people you work with, and how you deal with your boss.

a. If the people you are working with are trying to do a good job, go along with them and do a good job yourself. But if the others are trying to get by without working, or without doing a good job, go ahead and go a good job anyway. Then, it will be you who gets the raise, who becomes the leader, maybe even the boss.

b. Also, if you are going to get ahead on your job, you have to learn how to get along with your boss. Now, he may not always be right, but he is always boss. And he has plenty to worry about without going out of his way to give you a hard time. He's trying to make it the best way he can, just like you are. And he's probably looking for somebody to help him take on some responsibility.

c. So, if you don't let other people mess you up on your job, and if you don't make the boss make you do what you know you should do, you might just be the person he's looking for to give a better job.

d. Somebody is going to get the raises and promotions and advancements on the job. If you learn how to be a leader, it can be you who gets that raise. But it's going to take some extra effort on your part to get it. You have to be willing to take the lead and work a little harder than the average worker on the job.

B. FIND OUT WHAT YOUR BOSS WANTS YOU TO DO, AND DO IT

NOTE TO TEACHER: Handicapped tend to gravitate towards persons who contribute negative influences on their conduct. Probably, their constant exposure to television has contributed much to this tendency. Television, for better or worse, gets its message across, because its message is so persistent. Take a cue from this method, and reinforce your lesson materials over and over for handicapped. You are plugging in incentives and motivations for changing habits and behavior patterns which have developed for many years. For any of us, change is never easy. This is doubly true for handicapped. Nevertheless, they do make positive changes when the incentives and motivations are present to make the changes worthwhile. With the token economy system, the incentives are in place. With Welfare Line just a few steps away, so are the motivations. Bear in mind that you are in the process of changing more than behaviors; you are changing persons. This is the difference that makes the difference. These handicapped, in their upper high school years, are at a most crucial point in their personal development. The changes they make now will determine, to a great degree, what kind of lives they will have in the future. If you can gain their trust, instill in them a set of workoriented values, and guide them toward associations and relationships with peers and adult models of a positive sort, you will have contributed much--perhaps more than all previous influences combined--toward a full and rewarding life for your handicapped students.

Just keep hammering away at what you expect your handicapped to do. They may resist strict regimentation at first. However, they will respond favorably to constintency and persistence.

1. Also, find out how your boss wants you to be and be that way. There are some leadership qualities the boss is looking for in the people he gives a raise.

a. And who would you rather please: folks standing around doing nothing, and certainly giving you nothing, or the person who writes you a paycheck every week?

b. Also, her at school, who would you rather please: kinds standing around in the hall making "F's" or your teachers who decide what grade you deserve for your work?

c. And whether you believe it or not, teachers look for the same leadership qualities in students that bosses look for in people who work for them. Let's see if we can find out what those qualities are.

2. There are five qualities which leaders have--and which you can have--that help people get ahead in life.

a. And that's what we're talking about--getting ahead. What would you rather do: just barely get by, maybe just sort of get along, or would you rather get ahead?

b. Lots of time, folks who don't care whether they get ahead find out too late that they're really getting behind.

c. One of those five leadership qualities is dependability, which means the boss can depend on you. If you are given a job to do, the boss doesn't have to worry about that bit of work any more. He knows you're going to stay with it until you get it done. That's the kind of folks who get a raise now and then.

d. In this course, dependability is important too. Being dependable will earn you up to 3 extra tokens

NOTE TO TEACHER: These three lessons, Get a Job, Keep a Job, and Get a Raise, are essentially orientation information. Probably, if you are going to get the most from handicapped, and from your program for regulars at the same time, you will want to establish the token economy system for both handicapped and regulars. In fact, there is no need to make a big deal out of the fact that some of your students are handicapped. They are all just students, all enrolled in the same program, all working for successful attainment of program objectives. Your classroom sessions, shop sessions, and project sessions should include lessons for both handicapped and regulars, all working side by side, all achieving at their own individual level. Some time spent very early in the year for comprehensive orientation for all your students will get you off to a good start.

As far as these three lessons are concerned, you can develop them to whatever stage you feel necessary. Also, once you have gotten your program under way, you might want to drop back once in a while and go over the token economy system again. However, once your students get the hang of it, they will check their own balances daily to see where they stand. It is seemed beneficial, you could develop some information sheets which contain the same information as these lessons. However, you might be the only one to read them. Careful oral explanation probably is all you will need to present.

Essentially, teaching social skills is a dynamic, ongoing experience, more than it is a series of classroom lessons. Along with opportunities for students to earn tokens, there need to be, also, ways for tokens to be spent. Further, students need to know exactly what constitutes success and failure in a day.

e. Another leadership quality is initiative. Initiative means, if you know what needs to be done next, you don't wait for the boss to tell you, you go ahead and do it. Workers with initiative get raises. It will also get you 3 more extra tokens in this course.

f. Then, another quality of leadership is responsibility. You don't just do work when the boss is looking at you. And sometimes, you give some of the other workers a little help. You take a lead in getting them to do their work. Responsibility will get you a raise. It will also get you 3 more extra tokens.

g. Ever hear of loyalty? Bosses are looking for workers who are loyal. That means sticking by somebody. Who should you be loyal to: your boss, or somebody on the street trying to hustle you?

h. And at school, should you be loyal to some big bully on the campus shaking down some little kid for his lunch money? Or should you be loyal to a teacher or principal who is trying to put a stop to that kind of thing?

i. Or in the shop, should you be loyal to somebody slipping around trying to smoke, or trying to get you in trouble? Or should you be loyal to your teacher who is trying to help you get an education? Or to the kids in class who try to do a good job every day? Who and what you're loyal to shows what kind of person you are. It's the same at school, at work, or anywhere else. Loyalty will get you a raise on the job. It will also earn you 3 more tokens in this shop.

j. So, 4 of the 5 qualities of leadership are: dependability, initiative, responsibility, and the program. Then, there must be a plan of discipline which is both comprehensible to students and comprehensive enough to cover just about any situation which might develop. All these things, working together, comprise a work-simulation environment in which reward and recognition, penalties and consequences, are natural outcomes of individual student responses to the environment. These work-simulation environmental elements provide material for additional orientation lessons. The real evaluation for these will be in daily program experiences.

loyalty. People with these qualities get raises, promotions, and advancements. In this shop, those 4 qualities will earn you 12 tokens. There is 1 more: trust.

k. Trust works both ways: your boss needs to be able to trust you, and you need to trust your boss. And you do trust him, whether you think so or not. Every time you put in a week's work, you trust your boss to pay you on payday. The boss needs to be able to trust that, when you hit the time clock every morning, you are going to put in a good, honest day's work.

l. In school, you need to trust your teachers: to know what they are doing, to be fair in work they give you and the grades you get, and to do right by you when you break school rules, even if it means that you get punished for it. Trust will get you a raise on your job. It will get you 3 more extra tokens in this course.

m. So, dependability, initiative, responsibility, loyalty and trust are all leadership qualities. They will get you a raise on your job. And they will get you 15 extra tokens in this shop. It takes extra effort; it takes leadership and hard work. But so does anything else that's worth anything.

III. APPLICATION: Student Discussion.

A. Get Students talking about how to get a raise;

1. Why do some people get raises, promotions, and advancements while others don't?

2. Should a good leader also be a good follower?

3. Is it important for the boss to get along with the other workers?

4. What are the five qualities of good leadership?

B. Draw comparisons between getting a raise on a real job and earning bonus tokens in the building trades program.

1. Point out real and simulated similarities.

2. Try to get student reactions to earning bonus tokens through extra effort.

C. Review specific points of lesson content, particularly leadership as it applies to getting along with the boss and with fellow workers; the five leadership qualities—dependability,initiative, responsibility,loyalty, and trust; and particulars concerning earning bonus tokens.

1. Leadership involves extra effort, effort not paid for until the worker gets a raise because of leadership qualities.

2. Also, extra effort—doing more than the job assignment call for—is what earns bonus tokens.

IV. SUMMARY: STUDENT REINFORCEMENT. Don't forget, workers on jobs need to get raises and promotions to keep up with inflation and the cost of living. But you won't get many raises, if you don't put forth some extra effort. People who don't try to get ahead sometime get behind. So, do more than try to just keep your job; try to get a raise. By doing just a little more than required each day, you will have a job when others might be back on the street trying to get a job.

In This program, you can earn up to 15 extra tokens each day for doing the very best you can do—by putting forth some extra effort. This could mean a better grade for you, also.

V. VERIFICATION: Student Evaluation. No later than the next class session after this lesson, put the get a raise method into force. Those who put forth extra effort should receive bonus tokens for the day. However, these bonus tokens should not be used for computing the grade for the day. Grades are computed on the basis of get a job and keep a job earnings. Bonus tokens should be prorated percentile based on other earnings. At regular intervals, students who have accumulated a large balance of tokens may have their grades adjusted upward, with appropriate reductions of token balances.

At regular quiz, test, or exam intervals, material from this lesson should be part of the content.

NOTE TO TEACHER: Figure 1 depicts a handy form for recording student earnings in each category. Probably, you will need two such forms daily, one for your morning group and one for the afternoon group. Figure 2 depicts a weekly form for each individual student. Columns are provided for extending totals and forwarding balances. You will need one for each student each week. Figures 3, 4, and 5 depict other group and individual forms and charts which are discussed later.

A good Monday morning starter is allowing students to fill in names, dates, courses, etc., on their own individual forms for the week. This allows students to understand better the system by which they are evaluated in the course.

SCHOOL ____ COURSE ____

DAY ____ MONTH ____ DATE ____ SESSION: AM PM

TALLY BREAKDOWN

EARN	GRADE	BONUS
46-48	A/S	15
42-45	A/S	12
39-41	B/S	10
36-38	B/S	8
33-35	C/S	6
31-32	C/S	4

	GET A JOB						KEEP A JOB																		GET A RAISE					TALLY			
	(ROLL CHECK)						PERFORMANCE																		(BONUS)								
	MUST EARN 4-6						SAFETY			ATTITUDE				PRODUCE			MAINTENANCE					LEADERSHIP											
	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3							
STUDENTS	PRESENT	PUNCTUAL	ALERT	COURTEOUS	GROOMING	HYGIENE	SELF	OTHERS	WORK	INTEREST	ATTENTION	RESPECT	HONESTY	APTITUDE	QUANTITY	QUALITY	TOOL CARE	CLEANUP	STORAGE	SECURITY	CONSERVE	DEPENDABLE	INITIATIVE	RESPONSIBLE	LOYALTY	TRUST	EARNINGS	FINES	GRADE	CONDUCT			

FIGURE 1: DAILY CLASS SESSION TOKEN EARNINGS, FINES, AND TALLY.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

SCHOOL COURSE

STUDENT GROUP SESSION: AM PM

MONTH(S) DATES YEAR(S)

EARN	GRADE	BONUS	CHARGE
ABSENT 0	F/U	0	15
46-48	A/S	15	27
42-45	A/S	12	27
39-41	B/S	10	24
36-38	B/S	8	24
33-35	C/S	6	21
31-32	C/S	4	21
27-30	C/N	—	21
21-26	D/N	—	18

		DAILY RUNNING TALLY STATUS CHART MARKS																									
	REMARKS	TITANS ✓	TERRANS 5	CRETANS 10	SQUARE 1 20	F-TROOP 35	WELFARE B-W-F-S E-S-L-S	EXILE 50	BANISH. 75	LIMBO 100	PURGATORY 1-9	PRESENT ✓	ABSENT	TARDY	GRADE A-F	CONDUCT S-N-U	EARN 0-63	FINES 0 →	NET EARN	STUDENT OF WEEK	BALANCE FORWARD	STH. OF WK. BAL.	BANK. BAL. FWD.	NEW GROSS	GRADE DEBIT	PURCHASE DEBIT	TOTAL DEBIT	NEW BANK BAL.
MON.																												
TUE.																												
WED.																												
THU.																												
FRI.																												

FIGURE 2: WEEKLY INDIVIDUAL STUDENT ENVIRONMENTAL FLOW CHART. GRADES, CONDUCT, EARNINGS, FINES. PERMANENT DOCUMENTATION SHEET.

ENVIRONMENTAL STATUS LEVELS	TITANS ✓=WARNING	TERRANS 5	CRETANS 10	SQ 1 20	F-TROOP 35	WELFARE A-U-F-Q E-B-L-P	EXILE 50	BANISH. 75	LIMBO 100	PURGATORY 1-9
STUDENTS										

FIGURE 3: REDUCED MODEL OF STATUS LEVEL WALL CHART. TO BE ENLARGED ON 22" X 28" POSTER BOARD.

BEST COPY AVAILABLE

BEST COPY AVAILABLE

STUDENT OF THE WEEK -- DAILY RUNNING TALLY

MORNING SESSION | DATES / - / / / | AFTERNOON SESSION

STUDENTS	MON	TUE	WED	THU	FRI	STUDENTS	MON	TUE	WED	THU	FRI

FIGURE 4: STUDENT OF THE WEEK RECORD SHEET. TO BE POSTED IN ROOM AND UPDATED DAILY. (NEGATIVE TALLIES IN RED.)

SCHOOL COURSE

STUDENT GROUP SESSION AM PM

SCHOOL YEAR__________ SEMESTER _____ NINE WEEKS ________

TITANS ✓=WARNING			TERRANS ✓=5 TOKEN PENALTY			CRETANS ✓= 10 TOKEN PENALTY			SQUARE 1 ✓= 20 TOKEN PENALTY			F-TROOP ✓=35 TOKEN PENALTY		
EXILE ✓= 50 TOKEN PENALTY			BANISHMENT ✓=75 TOKEN PENALTY			LIMBO ✓=100 TOKEN PENALTY			WELFARE LINE CODES: A-U-F-Q E-B-L-P			PURGATORY CODES: 1-9		

FIGURE 5: NINE WEEKS INDIVIDUAL STATUS LEVEL INFRACTIONS. PERMANENT DOCUMENTATION SHEET.

BEST COPY AVAILABLE

Item 4: Earn Individual Recognition--A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be both able to relate daily program performance with special individual recognition for outstanding classroom, shop, and project work.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn how you can earn some special recognition for outstanding work each week. If you get a job each day, keep your job by doing good work, and get a raise by putting forth extra effort, you will earn a lot of tokens each week. Besides using these tokens for grades, you will get some special recognition for the total number of tokens you earn. If you earn the most tokens in a week, your name will be posted in the classroom as the student of the week. If that happens, your name will be on the classroom wall for the rest of the year. Also, there will be a chart on the wall each week which will show how many tokens each students earns. So, everyone will earn some special recognition, depending on how many tokens each student earns.

Also, another important point you will learn is the fun there is in good, clean competition. Your token earnings will be posted on the wall chart every day. That way, each of you can see how well you are doing. On many jobs, employers run contests of one kind or another for employees. So this will be something like that. Surely, you will want to do your best every day, so you will have a chance to be student of the week.

So, pay attention, in order that you can understand just how this system works. Also, you might see some of this on a test one of these days.

II. PRESENTATION: Student Information. First of all, it will be possible for you to earn as many as 63 tokens each day. This adds up to 315 tokens a week, To earn the entire 315, you would have to earn 6 each day for your interview, 42 each day for your job assignment performance, and 15 each day for your bonus tokens. Also, you would have to avoid getting any fines for poor conduct, because fines will be taken away from your student of the week earnings. Here is how it will work.

A. EARN AS MUCH AS YOU CAN.

NOTE TO TEACHER: No matter how much students, or anyone else, protest to the contrary, everyone wants recognition and enjoys competition. There is no such thing as success, unless the possibility of failure is a reality. For handicapped, as well as some regulars, whatever recognition they receive in vocational courses is all the regard of that nature they will ever get in school. Recognition comes, usually, for outstanding personal achievement, and may come from peers, superiors,

1. Come to class every day--on time, wide awake, and ready to go to work.

a. Remember, the first thing you have to do each day is get a job.

b. If you get a job, you can earn as many as 6 tokens; to get a job, you have to earn at least 4.

2. Do your very best work--every day you are in shop, all the time you are in shop; try to keep your job.

a. Work safely; watch out for yourself, and for everybody else.

subordinates, or any combination of the three. Most of the time, all three will be involved in some way.

The student of the week recognition may by as simple or as elaborate as is convenient. The important thing is that the observance by pretty much the same week after week.

Probably, the best time to make the recognition of student of the week is the following Monday. As a minimum, a piece of poster board about 6" x 12", with student's name, "STUDENT OF THE WEEK," and the dates of the week, should be prepared in advance. After announcing the winner, the poster should be fastened to the wall, where it should remain for the rest of the year. Additionally, and at your option, a special recognition could be held for student of the month, every nine week, each semester, or at any other interval. Sometimes, a weekly winner may be a flash in the pan, while a steady,middle of the road student may have more consistent earning which will show up over a longer period of time.

Also, if resources permit, the winner could be given a pencil or some other token prize, along with the posting of the placard. The important thing is that the recognition be earned, and that it then be given.

B. AVOID CONDUCT FINES.

NOTE TO TEACHER: More will be mentioned about conduct fines in future lessons. You might want to look ahead and get some idea as to appropriate fines for various levels of misconduct. Questions could arise in this lesson which would necessitate some specific answers from you at this point. In any event, you should initiate a system of fines for misconduct no later than at the conclusion of this lesson. Handi-

b. Be prepared; show interest in what you're doing,and pay attention to directions and instructions.

c. Have a good attitude, be respectful of everybody, and deal honestly with everybody—expect to earn what you get by hard work.

d. Be concerned about work production; show an aptitude for a sufficient quantity of work of a good quality.

e. Help with shop maintenance: tool and equipment care, daily clean-up and storage, shop security or lockup, and conservation of shop materials, supplies,and energy.

3. Put forth some extra effort—try to get a raise and earn bonus tokens.

a. Practice leadership; be dependable, show initiative, act responsibily, be loyal, and trust your teacher and fellow students to do their jobs.

b. If you get a job, keep a job, and get a raise, you will earn a lot of tokens.

c. If you do that every day, you could be the student of the week.

1. Behave yourself--act the way you know students should act when they are in class.

a. You will be fined from 5 to 100 tokens for misconduct; depending on how sever the misconduct is.

b. These fines will be deducted from your bank balance, and could eventually ;lower your grade, as well.

2. Keep your job--misconduct can get

capped, as well as regulars, will respond quickly to this kind of penalty, since fines reduce earnings, rewards, and recognition, and could eventually have an adverse effect on grades.

you fired, on a real job, or in the shop.

a. Losing your job assignment won't help you be student of the week.

b. Even if you keep your job, it won't take many conduct fines to keep you from being student of the week.

III. APPLICATION: Student Discussion.

A. Get students talking about personal recoginition as a kind of reward.

1. Why do some football players get stickers to go on their helmets?

2. How might an employer give personal recognition to an employee?

3. What does good conduct have to do with getting a job, keeping a job, getting a raise, or getting personal recognition?

4. How might a worker be penalized on a real job for misconduct?

B. Draw comparisons between personal recognition and earning money or tokens as rewards.

1. Discuss real and simulated similarities.

2. Try to get student reactions to the personal recognition plan for student of the week.

C. Review specific points of lesson content, especially the adverse affect misconduct has on token earnings.

1. Being ready for an interview can get you a job; hard work can help you keep a job; extra effort can get you a raise; and all of this together can get you special recognition as an outstanding individual.

2. But poor conduct can wipe it all out--anywhere you go--at school, at home, at work, or anywhere else you have dealings with other people.

IV. SUMMARY: Student Reinforcement. Any student in the class can be student of the week, but no student can get this special personal recognition without a good attitude, hard work, and good conduct. Without good conduct, your fines could wipe out what you do earn. So, being student of the week is just like anything else: If you want that recognition,you have to earn it by doing good work and having good conduct.

V. VERIFICATION: Student Evaluation. No later than the next class session after this lesson, put the personal recognition method into force. Figure 4 depicts a model for both a form and a larger wall chart. The form is for private record keeping to prevent student tampering; the larger chart is for posting, so that students may check their standings daily.

At regular quiz, test, or exam intervals, material from this lesson should be part of the content.

Item 5: Take a Break—A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to take a regularly scheduled daily break during the class session, without beginning prematurely or prolonging the limits, and associate this daily drill with the privileges and responsibilities of workers taking a break on a real job.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn how you can have a break at the middle of the class session every day,providing you don't abuse the privilege to the point that you lose the break.

Also, another important point you will learn is that the break we take is very much like that of real workers on real jobs. However, sometimes, workers lose their privileges, because they take too much advantage and abuse the conditions of their break.

So, listen closely, so that you can learn what your responsibilities are for continuing to have break privileges. Also, sooner or later, you will have a test over the material in this lesson.

II. PRESENTATION: Student Information. On most real jobs, workers stop work 3 times during the day: for a morning break, for lunch, and for an afternoon break. They take lunch on their own time. That means, they are not paid for the time they take off for lunch. However, they do get paid for their break times. Statistics show that, when workers take breaks, they have less accidents, and they increase production. Probably, this is because breaks interrupt the monotony of work and give the workers an opportunity to rest and refresh themselves. Since we are not in this class all day, we will only take one break, instead of two. However, your token earnings will go on, just as if you were working. But if you want to keep on taking a break, you need to be concerned about your personal responsibilities. Here is how we will take our breaks.

A. WAIT FOR THE SCHEDULED TIME TO START.

NOTE TO TEACHER: Since most building trades courses are three class periods long, the break will fall between bells. On the project site, this will make no difference. However, in the classroom or shop, students will hear the bells and may require a little training to get accustomed to ignoring bells and taking a break at other times. In a two period shop, of course, the break might fall on a bell, although the break might be longer than a regular period change. In any event, taking a break can be a drill

1. Work right up to the time to start the break.

a. Sometimes, individual workers get fired for abusing break privileges.

b. Or, if the entire crew starts abusing breaks, the boss might just do away with the break altogether.

c. We will handle our break the same way: If one or two of you start taking your break too early, you will get fired; if all of you start jumping the gun, we will just do without a break.

in a very important work skill in a real work situation. Handicapped students, particularly, have difficulty in meeting a tight schedule. They need the training for stopping and starting work within prescribed time limits. In view of this reality, a daily break should not be regarded as lost time from class work. For three period classes, a 15 minute break is about right. For two period classes, 10 minutes should be sufficient.

B. ALL TAKE THE BREAK AT ONCE.

NOTE TO TEACHER: Handicapped, and some regulars, work one of two ways: not at all, or all at once. If it's a job in which they are not particularly interested, they can lie down by it and go to sleep. Or if it's something they're enthused about, they don't want to stop. Then, about the time everybody else starts back after their break, the novelty has worn off, and they want to take their break, go to the rest room, get a drink of water, you name it. Enforce the same rules for a break which would prevail in a real work situation. Make continuation of the break the responsibility of every student. Fire individual students who persist in breaking the rules; suspend the break when too many get careless about stopping and starting.

As far as specific boundaries and privileges go, these would vary with individual shops. Some have drinking fountains and rest rooms; others do not. Some might even have drink and candy machines. The main thing is that whatever the rules, boundaries, and privileges, they need consistent enforcement. The break should enhance the class session, not detract from it.

Also, the break is a good time for you to catch up some of your record keeping, a chore you can't do, if you have to supervise one or

2. Be sure to turn off all equipment or power tools you might have running before you start your break.

a. Also, cover any paint, or just shut down in general anything that might ruin, get damaged, or cause a safety hazard before you get back from your break.

b. Turn out any lights, heating or cooling that won't be needed during the break.

1. Stop all work; everybody take the break at the same time.

a. That way, no student will be working alone at some job which might be more hazardous without supervision. Teachers like to take their breaks, too!

b. An exception would be if you are doing some kind of work which can't be left—finishing concrete or wiping wood stain, for examples.

2. Get water and go the the rest room, if you need to. That's part of what breaks are for.

a. Water and rest room trips will not be permitted at other times, except in extreme emergencies. And they will cost you, even then.

b. Going to the rest room or the water fountain just any old time will get you fired off of nearly any job—and it will get you fired out of shop, too.

c. Of course, if we're working hard out in the hot sun, we will have a can of cold water with us. And you can get water any time you need it. Just don't turn it into a 15 minute break every time you go.

3. Stay inside the boundaries that are set; especially, stay out of other folks' classrooms and away from students out of other classrooms.

two students in the shop who want to work while the others take a break. At the same time, neither can you take any kind of a break if you have to chase strayed students all over the school campus. Acting responsibility on free time is perhaps the hardest job any of us have to do. Nevertheless, it is an obligation all of us have to meet, if we are to be successful in life.

C. RETURN TO YOUR JOB ON TIME.

NOTE TO TEACHER: This lesson will conclude orientation in program earnings. To this point, mention has been made of grades, tokens, recognition, and privileges, all as earnings. The next lessons, mostly in the form of a discipline plan, will outline expenditures. These expenditures relate, primarily, to tokens, either for grades, fines, or purchases. However, loss of privileges or lowering of grades might also be considered as expenditures. All elements of these social skills lessons relate to the work simulation environment. In any social environment, all participants strive to earn recognition and reward and to avoid penalties and consequences. This is really what social skills are all about. All four--recognition and reward, penalties and consequences--are outcomes of negative behavior. In either case, individuals bring them to themselves. Handicapped may not know this, but can learn it when they have experienced it. Then they won't forget it.

a. If one or two student make a practice of straying off, they will get fired.

b. If several of you do it, you will all lose the break.

1. When the break's over, its over.

a. Don't try to drag it out beyond the time allowed.

b. Remember, if you abuse it, you lose it.

2. The break is a privilege, not a right.

a. It is is to continue, it must be part of shop learning. Taken right, it is learning: learning how to take a break within the proper time,in the proper way,and in the proper place.

b. If is taken right,it should make our work safer--by breaking up the monotony of work.

c. And it should increase our work production--because we will return to work rested and refreshed.

3. We will continue to take a break as long as we work like we should, behave like we should, and take the break like we should. Otherwise, we will do without a break. This is something that's entirely up to you.

III. APPLICATION: Student Discussion.

A. Get students talking about general aspects of a work break.

1. How does a break affect work safety? Why?

2. How does a break affect work production? Why?

3. What happens if one or two abuse break privileges? What happens if most abuse the break?

4. Is it fair to fire someone for abusing a break? Is it fair to take away the break?

B. Draw comparisons between a class break and a real work break.

1. Discuss real and simulated simularities.

2. Try to get student reactions to break privileges and responsibilities.

C. Review specific points of lesson content, especially student or worker responsibilities for not abusing the break.

1. Breaks make work safer and more productive.

2. Vocational shop breaks can teach students how to take real breaks on real jobs.

3. A work break is not a right, but a privilege. Privileges abused are privileges lost.

IV. SUMMARY: Student Reinforcement. As long as most of the students in the class use the break as a learning experience, keep the break time within specified limits, and conduct themselves as they should on break, the break will continue. Those few who persist in abusing break privileges will be fired from the class session for the day. Real workers take real breaks on real jobs. As a result, work is safer and more productive. The same should be true in a vocational shop, as well. It will be as true as we make it by our responsible involvement and participation in the shop break as a part of our vocational instruction and training.

V. VERIFICATION: Student Evaluation. No later than the next class session after this lesson, put the shop break into force. How responsibly students exercise this privilege is the main evaluation. As much as possible, deal with students individually for infractions of shop break rules. However, if abuses became rampant, suspend the break for a time, then try it again.

At a regular quiz, test, or exam intervals, material from this lesson should be part of the content.

b. Token Expenditures. Just as token earnings derive from the environment in an environmental token economy system, so does survival in the environment depend on environmental expenditures. In the case of a vocational program, the environment is work-simulation, with earnings expended for obtaining whatever is available, desirable, or necessary in the environment. Grades are necessary expenditures for success. If misconduct threatens survival in the environment, fines are available as one means of rectifying the infraction or offense. Also, some desirable commodities ought to be available for which excess tokens can be spent. Thus, as in any other environment, some form of discipline is essential for peaceful, orderly survival. Therefore, an environmental plan of discipline is the logical approach for outlining the means for most token expenditures. Such a plan of discipline should provide for levels of survival contingent upon individual effort, involvement, participation, and conduct. Also, the discipline plan should be structured along lines consistent with student attendance, performance, and social conduct, as documented on student report cards.

2. An Environmentally Structured Plan of Discipline. Any workable discipline plan relates personal choices and the natural consequences of those choices within the structure of the environmental social setting. By definition, discipline is not punishment for social offenses but is, rather,the social structure itself, from which outcomes evolve naturally. Rewards and recognition are positive social outcomes; penalties and consequences are negative outcomes. "Outcome," then is a neutral term which identifies either negative or positive results of personal choices. Positive outcomes are positive because they are so defined by the disciplinary structure of the environment. Negative outcomes are negative for the same reason. Rules within themselves do not prevent students, or anyone else, from committing offenses or infractions against the social environment. Instead, rules only prescribe rewards for for positive choices and penalties for negative choices. These are the principles of any good plan of discipline in any social environment, classroom or otherwise. That is to say, whatever rules are in force should be inherent in the nature of the environment itself. Then, offenses result in natural consequences because these offenses are against the environment, not against individuals within the environment. The same is true of rewards: Individuals who make good or positive choices act in harmony with the environment, and rewards are the natural or logical outcomes of these choices. Thus,it may be seen that a social environment is nothing more or less than a microcosm of the larger and surrounding natural environment. Any social environment, whether it be school, work, home, or community evolves naturally out of human behavior. Groups of people, gathered for whatever purpose, eventually structure a plan of discipline which makes survival possible within that setting. Rules develop; rewards and penalties are established. In time, if the group survives, the plan of discipline becomes more refined. Rules become laws. Rewards and penalties become more sophisticated. And some small corner of the natural environment evolves into a social environment which survives because its social law is an authentic expression of natural law.

Social law has evolved out of hamanity's survival in the natural environment which is governed by natural law; thus, both the social environment and social law are extensions and enlargements of nature and natural law. In this light, any argument that humanity is more subject to social law than to natural law is invalid. Any social environment and its laws, if these are artificial, will become extinct. Therefore, the purpose of social law comes out indentical with that of natural law—survival in the environment. More to the point here, any legitimate plan of discipline for a classroom and/or shop should be structured along lines which adhere to these same principles of rules or laws for survival in the social environment of the learning situation.

In reality, the severest penalty of all for offenders of laws or rules is the reduction of available choices. The offender of the law may first be fined for the violation. Thus, choices concerning monetary expenditures are reduced. Next, if violations persist, the offender may be placed on probation. Then, choices for mobility, associates, and activities are severely reduced. Finally, habitual violations result in imprisonment, with extremely severe reduction of choices. In some cases, capital punishment deprives the offender of even the choice to live. Individual and personal extinction occurs as a natural outcome of negative choices. In any event, this process of choice reduction continues until some level is reached where the social environment can continue, with or without the offender. For all practical purposes, individual, personal extinction occurs when any person is deprived of social choices which make life meaningful, especially if the offender is removed from the social environment. If a classroom plan of discipline is to be truly environmentally structured, reduction of choices must be a key element of the plan.

In a building trades program, the learning environment consists of three distinct components: the classroom, the shop, and the off-campus project. Obviously, the discipline plan must be flexible enough to make specific allowances for each component.

a. Classroom Discipline. As nearly as circumstances will allow, discipline in the building trades classroom;should be very much like that in any other classroom. The teacher can render a great service to handicapped students, and to some regulars, as well, by teaching them how they should conduct themselves in order to survive in any classroom. Some handicapped students may be disruptive to classroom order more than most other students. This is mainly because, for whatever reasons, they have not come to understand that consequences are the natural outcomes of choices. Probably, they do not understand this, mainly, because they, as handicapped, have been shielded from the consequences of their choices. In a building trades program, it is not possible that they can be successful if they are not made responsible for their choices of classroom conduct. Again, discipline in the classroom should be a matter of environmental extinction, survival, or thriving, all geared to personal choices and natural consequences. Good discipline, in itself, is one of the greatest teaching tools of the teacher's trade. Through fair, firm, consistent discipline, a teacher can teach students how things really work in the larger society. The secret is a classroom environment where the number of choices available depends entirely on personal classroom conduct.

The classroom environment should function exactly like any other social environment, with respect to choices and opportunities, rewards and recognition, penalties and consequences, success and failure. Also, in the classroom, it is possible to make the environmental aspect very graphic and vivid. Two integral possibilities exist, one optional and one essential. If the classroom is large enough to allow it, certain sections can be marked and identified as more desirable to occupy than others. This way, students can lose choices as to where they will sit. If the room is not that large, an environmental chart where students receive marks for misconduct will serve as well. The chart is necessary either way. In either case, through a system of rewards and penalties, certain areas of the environment can be made more desirable than others. Figure 3 depicts a minature model of the environmental chart which should be posted on the wall, whether or not the room size allows movement of student for misconduct.

Item 6: Behave Yourself and Be Somebody--A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify levels of personal conduct with levels of social survival, and relate the classroom experience to personal success and failure in all other social settings.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn what classroom misconduct really is, what misconduct will cost you, and how rules for proper conduct will be enforced. People are not what they are because of the way they act; they act the way they do because of what they are. Usually, personal success and failure relate directly to personal conduct. That"s why, if you want to be somebody, you have to behave yourself.

Another important point of this lesson is that you will learn how poor conduct adds up over a period of time, until it will finally wipe you out. In this class, you will get check marks on a chart for your misconduct. These marks will remain in place for nine weeks. If you get so many marks your charts fills up,then you will really be in trouble.

So, listen up, and learn one of the most valuable lessons in this course--how to stay in the course. Also, you will be tested over this material later.

II. PRESENTATION: Student Information. Usually, people break rules, not because they don't know what the rules are, but because they don't understand the reasons for rules or the effect rule breaking has on their survival in their social environment. Most of the time, people expect each other to know and keep the rules which are set for everybody. Those who break rules are penalized in one way or another. Those who break enough rules are finally moved out of the environment. Jails, prisons, and graveyards are full of people who are there because they broke the rules. So it is east to see that knowing how to act and acting that way pays off. But when people don't act as they should, the cost is very high, whether they know the rules or not. What people need to know and understand is this: They need to know proper conduct from misconduct, and they need to understand the rewards for proper conduct and the penalties for misconduct. Once they know this, then they can choose for themselves whether or not it is work it to keep or break the rules.

A. KNOW THE DIFFERENCE BETWEEN PROPER CONDUCT AND MISCONDUCT.

NOTE TO TEACHER: The real purpose of this lesson can be accomplished only by constant, persistent practice day by day. For the real objective here is to develop personal attachment of students to a highly structured environmental system of rewards and penalties. Attaining and sustaining a highly successful level of survival in the system must become personally important to individual students. Undergirding this entire system is the effort to help students create an internalized attachment to the school environment. The method for helping accomplish this is simply demonstrating the similarities between the school environment and any other social environment. Obviously, the school is a microcosm of our entire social structure. But very few students actually know how school really works. They don't know that the governing body is

1. How we act is not necessarily a matter of good or bad conduct. It's more a matter of acting properly for the setting or the occasion.

a. What might seem bad at school or at church might be all right in a game room or out in a park.

b. So, it's more a matter of what's proper. We get into trouble when we try to bring one kind of conduct into another kind of situation.

2. That's what rules are for: To allow things to go on as they should in a given situation.

a. Rules are made to fit the occasion. We have rules for school, rules for work, for play, and for home.

b. These rules tell us how we should act in all these situations. And they may not be the same in all cases.

elected by the democratic process. They have no concept of the input of private citizens in the development and establishment of school policies. Students have the idea that teachers and principals arbitrarily enact rules for no better reason than they have nothing else to do. No one has ever told them that people who enforce rules are rarely, if ever, the people who make the rules. No one have ever told them that school is the gateway to every good thing in our society. And no one has ever pointed out why some types of conduct are out of place in the classroom. All these aspects are implicit in this lesson. So, daily drill in these aspects are more important than the written information in the lesson. Constant application is the key.

NOTE TO TEACHER: Time spent on this lesson, particularly with the handicapped is time well spent. A good orientation, early on, provides students with a clear concept of what you expect of them and what they can expect from you. With the handicapped , this kind of understanding is essential. Also, discussions about the school and classroom environment open up broader fields of discussion pertaining to the larger society. For the handicapped in particular, any information you can pass on con-cerning the way the world works is vitally important. They need to know about the work world in general and the construction industry specifically. They need information about the various levels of the political and social systems, both locally and worldwide. Further, they need to learn the value of health, safety and hygiene, of wholesome recreation and leisure, and of better ways to relate to home and family. Then, they need to have information about job sources, about how to complete various forms, and anything else related to social survival. Very likely, the presentation of this

3. We are talking today about rules for the classroom, and about proper conduct in the classroom.

a. Before we can know how we should act, maybe we need to know what classroom misconduct really is.

b. Classroom misconduct is conduct which prevents teaching and learning.

c. That's what classrooms are for: for teachers to teach and for students to learn. Anything we do which interferes with that is misconduct.

4. There are two kinds of classroom misconduct withdrawn. Conduct is one type:

a. Withdrawn conduct is what you do that keeps yourself from learning.

b. Being absent or tardy a lot is one kind of withdrawn conduct, because students can't learn when they're not in the classroom.

c. Neglecting to do homework or classroom assignments is another kind of withdrawn conduct. You can't learn anything by just being in the classroom; you have to be involved.

d. Another kind of withdrawn conduct is just not paying attention, not being interested, or not listening to teacher's instructions or directions. How are you going to know what to do in class if you don't hear the teacher tells you?

e. Also, don't try to sleep in class. Maybe you think this and other types of withdrawn conduct is nobody's business but yours. But it is. The teacher's business is to teach. If you are withdrawn, you are preventing yourself from learning and the teacher from teaching you. In other words, you are not doing your job, and you aren't letting the teachers do theirs either. Remember, kind of instruction will be beneficial not only for handicapped by also for regulars. Time spent dispensing this kind of information will not be wasted, and the vocational program may very will be the only course in school where such information is presented.

One aspect of this part of the lesson needs bearing down on pretty hard for the handicapped: withdrawn conduct. Handicapped students know about the penalties for disruptive behavior; most of them have already had some experience along these lines. However, many of them have the idea that nothing is wrong with just simply withdrawing from the lesson and doing nothing. And "doing nothing" is their term. "Who are you jumping on me. I didn't do nothing." They need to understand that doing nothing is a conduct offense when they should be doing something. You may get some argument about this part of the lesson, but hang tough. They'll come around when they realize that you mean business. And they'll be glad that you insisted on their participation.

NOTE TO TEACHER: In this next part of the lesson, classroom conduct will be dealt with specifically. Obviously, a teacher can take more intermediate steps in dealing with classroom misconduct than with shop misconduct, probably more in the shop than on the field project site. The discipline plan should be structured to include provisions for all three locations.

teachers get paid to teach. That's their job. It is a type of misconduct to keep a teacher from teaching—one student, any student, or all students.

5. The other type of misconduct besides withdrawn is disruptive conduct.

a. Disruptive conduct is what you do that prevents you and other students from learning and prevents the teacher from teaching.

b. Disruptive conduct is probably more serious, because more students are involved. And you don't have the right to keep other students from learning, just as you don't have the right to keep the teacher from teaching.

c. There are many kinds of disruptive conduct, some more serious than others, but even minor disruption becomes serious, if you do it often enough.

d. The kinds that are not so serious are those which happen most often: talking without permission, getting out of your seat and moving around, making a lot of unnecessary noise, interrupting the lesson with a lot of talk about other things—all of these may not seem very serious, but they prevent a lot of teaching and learning. That makes them serious.

e. More serious kinds of disruptive conduct include fighting, breaking laws, violating safety rules, and defying teachers' authority. Of course there are many more than these, but these will do for now.

f. Also, remember: little disruptions, if they happen often enough, become serious, too.

g. So, know what proper classroom conduct is, and do it. Know what the rules are, and keep them. Then, at home or the pool hall or wherever

B. KNOW WHAT THE REWARDS AND PENALTIES ARE FOR WHAT YOU DO.

NOTE TO TEACHER: Since only about 60% to 70% of earned tokens are used to purchase grades, students with good conduct will have an accumulating balance of extra tokens most of the time. Of course, periodically, students' grades can be adjusted upwardly, and their accounts can be reduced in this manner. However, even then, extra tokens will accumulate. If students are to truly value the token economy system, they need something to buy with their tokens. One important item for sale in the classroom could be a pencil, especially if having a pencil is an essential item for class preparedness. Other items for work or break time could be made available, if shop or club funds are sufficient to provide them. The teacher's discretion is necessary here, and nothing should be for sale which will adversely affect any part of the instruction or training. Perhaps the most important use of tokens, other than for grades, is fines for conduct offenses. This part of the lesson includes both student and teacher information about the use of tokens for misconduct fines. Misconduct fines are graphically demonstrated if printed tickets are issued for the offense. Also, token penalties are involved in using the environmental discipline chart.

Two things are important in using the token fine form. First, the form becomes a permanent documentation of misconduct. It should be retained for future reference. Second, the student's signature is

else you may go, you might be able to talk and act some other way, and it might be OK. But at school, and in this classroom, keep the rule, and behave yourselves. Otherwise, be prepared to pay the price for any other choices you make.

1. A classroom is a little world all its own—a place where people work together, where they are rewarded and penalized, and where they succeed and fail—just like any other place where there is a group of people.

a. Most of the people in this room are peers: people very much alike in most ways.

b. Then, just like most any other social situation, there is an authority figure: the person in charge. The teacher is always the authority figure in charge of the classroom.

c. So, if a classroom is much like any other social situation, then it ought to work just like any other social situation.

d. And that's what we're going to do: have a classroom that runs on the same principles that run the world.

2. We already know that we can earn tokens for the work we do in this class. Tokens are to us in our classroom environment what money is to the real world.

a. If that's the case, then much our rewards and penalties in this class will be related to tokens.

b. Just like rewards and penalties in the real world are related to money.

3. Now, let's look at another kind of social rewards and penalties which is important to all of us—status.

important. Refusal to sign the ticket is very similar to a motorist's refusal to sign a traffic citation. All of a sudden, there is a new and much more serious problem. If a student refuses to sign the ticket, resort to the status penalty for the new offense of defiance. Signing the ticket is not a student's admission of guilt; it is just acknowledgement that the ticket has been written. But just like in a real court, it is the student's responsibility to appeal the fine to a higher authority.

With or without the room arrangement, the status chart is used the same way. When a student's conduct begins to interfere with teaching and learning, simply go to the chart and put a check mark in the appropriate column by the student's name. If the student asks about the mark, spend no more that 10 seconds explaining what the misconduct was. Don't allow any argument about it. If the student refuses to accept the mark without arguing, place another mark in the next status level on the chart. Continue the process until a level is reached where the problem can be solved. This is where room arrangement is so effective. A mark in the Titans column means a warning only. For this mark, no move by the student is necessary. But if the misconduct continues, the next mark, under Terrans, requires that the student move to the Terrans seating area. All of a sudden, the student's conduct has effected a status change which everyone in the room can see. The student has lost the choice of sitting with the rest. That student no longer has as many choices as everyone else in the room. In any event, the process of marks on the status chart continues until a resolution is reached. The chart is the key; arrangement of the room and movement of students in the room is nice, but not necessary. Also, use of the chart does not

a. Status has to do with where we live, what kind of house we have, the car we drive, the work we do, the money we make, and the clothes we wear.

b. Status is how we look to ourselves, and how we look to other people.

c. All of us want to feel good about ourselves and look good to others.

d. If we work hard and get the things in life, we feel rewarded. If We don't get the things we want, we feel penalized.

4. We will use status in this class for rewards and penalties. Here is how it will work.

a. Each day, everyone will start equally. And since we ought to start off feeling good about ourselves, we will call ourselves "TITANS."

b. Titans means giants, and that's how we want to feel about ourselves and each other.

c. As long as you maintain Titan status each day, you will not get any penalties for your misconduct.

d. As a Titan, the worse thing you can get is a free warning and a check mark by your name on the discipline chart. But remember, you only have 9 free warnings in the Titans column of the chart. Once you use them up, there will be no more free warnings for the rest of the 9 weeks.

e. So, it's best if you behave yourself and don't get any marks. However, if you do get a warning mark, and then stop the misconduct, you won't be penalized any tokens.

5. But what if you keep on with your misconduct? What happens then?

a. If you pick back up with misconduct, you will get a check mark prevent the teacher from using verbal cautions and warnings, if desired. The chart comes into the picture when the teacher chooses to move beyond verbal correction of students. For that matter, verbal warnings can be given, even after the student has already received marks on the chart. However, students learn pretty quickly how far teachers will allow situations to go. Too much verbal correction can undermine the effectiveness of the status chart method.

NOTE TO TEACHER: Properly utilized, the status chart becomes something of a permanent indicator of individual student status. Once marks are placed on the chart, they remain there for the remainder of the 9 weeks. Any mark used is gone for good until a new chart is posted. Thus, students can see for themselves the accumulative changes in status that are developing at different rates for individual students. Also, the accumulation of marks begins to become more and more serious problems for the students. For example, students will use up their Titans marks first, which are free warnings. That means that, although students begin each day in the Titans status, at the first misconduct, their status becomes whatever is the next highest where they have chances left for marks. They begin with nine chances in each status level. However, as they use up their chances,they have to survive on whatever chances they have left.

NOTE TO TEACHER: The Welfare Line Code would go in the blocks of the Welfare Line column, just as marks or checks go in the others. In the event students use up their Welfare Line chances or blocks, Welfare Line Code letters go in whatever blocks remain under Titans, then Terrans, and so on, until no more blocks remain. Whatever token penalty is provided in the column where the

by your name in the "TERRANS" column. You will be penalized 5 tokens, and your status will change.

b. Terrans means earth dweller, which would mean a change in status from a giant to a regular mortal human being. Now, being human is OK, but not if you are in a room full of giants!

c. Also, along with your change in status, you will be penalized 5 tokens.

d. Besides that, you will use up one of your Terran marks. If you use them all up before the 9 weeks is over, your status change and penalty will be worse.

e. Like we said at first, if we are going to be somebody, we have to behave ourselves.

6. As you can see, the longer you keep on with the misconduct, the worse your status gets and the higher your token penalty will be.

a. Continued misconduct after you get a Terrans mark will get you a "CRETANS" mark and a penalty for 5 more tokens. Cretans are people who live on an island called Crete. Being an island dweller might be OK, but not if everybody else lives somewhere else.

b. The next mark that day for misconduct will fall under "SQUARE 1." You know what Square 1 means; it means you're just about to blow the whole deal. The Square 1 mark will cost you 10 more tokens, or a total of 20.

c. The next misconduct mark for the day will be under "F-Troop." And that's exactly what it means. If your status changes to F-Troop, you will get an "F" for the day, you will not be permitted to participate any further in the day's lesson, and you will be fined 15 more tokens for a code letter is placed should be exacted from the student. This is a graphic depiction of what actually happens to the person who stays out of work too much. Things get increasingly worse in reality, just as it does in this graphic simulation. Students will be able to make this association quite readily.

total of 35.

7. There are some other status levels on the chart, but these have some special provisions which need further discussion to make sure you fully understand them. Let's take them one at a time.

a. Let's look first at the "EXILE" status. This would be your next mark after F-Troop. Serious things happen if you get an Exile mark. First of all, an Exile mark means a drastic change in your status level. If you get an Exile mark, you will have to leave the room. That's what exile means: that someone has moved you out and away from the good things in life because of your misconduct. That's why we have jails and prisons--to exile people who create problems in the social environment. But we have other ways that we exile people. In any crowd you're with, if someone in the crowd begins to act in a way the rest don't like, they figure out a way to get rid of the person causing the problem. Maybe that has even happened to some of us. Second, if you get exiled, you will be penalized 15 more tokens for a total of 50. Here is how you get put in Exile: If you are already in F-Troop status, and if you act up again--even try to take part in the lesson, you will get an Exile mark and have to sit out the rest of the class session out of the room. You will get an "F" for a daily grade, and your misconduct will cost you 50 tokens.

b. Now, what about "BANISHMENT?" Well, that's a lot like Exile, but even more serious. You see, what's happening is, you're getting further and further from the classroom and closer and closer to the principal's office. Banishment means being put out, and that's what it means here. How does Banishment work? First, if your are in Exile, and you keep on acting up, you will get a Banishment mark. For that, you will be penalized 25 more tokens for a total of 75. Also, you will have to sit out the entire class and get an "I" for the day.

c. Next comes "LIMBO." Limbo means being in an uncertain situation. And that's exactly what it means for us. For if you get a Limbo mark, you get to visit the principal. What the principal decides to do about you is beyond the control of anyone in this room. That's why your outcome will be Limbo, or uncertain.

8. There are two other columns on the status chart which are a little different from the others, and which have special significance. Let's examine each one of these.

a. First of all, there's the "WELFARE LINE." We already talked quite a bit about this column. This is where we sit out and take an "F", if we don't get a job, or if we get fired. Instead of check marks, you get code letters on this column. How do you get these letters, and what do they mean?

How many ways are there not get a job? Let's count them up:

(1) You have your daily interview, but you don't earn as many as 4 tokens so you don't get hired. That means you are unemployed. Thus, one code letter is "U".

(2) You don't come to school, so you don't have a job interview. If you don't keep your appointment for an interview, you certainly don't get a job. So, one code letter is "A", for absent.

(3) You get a job, but you don't take care of it, and you get fired. One code letter, then, is "F", for fired.

(4) If the teacher has the right to fire you, you ought to have the right to quit. And you can quit, if you

are willing to sit out the class, cause no trouble, and take an "F" for the day. The code letter for that would be "Q", for quit.

(5) Then, sometimes, you might be isolated from the room because of some discipline problem you need to clear up. You would be on campus and not counted absent, but you wouldn't be in class. The code for that is "I", for isolation.

So we have 5 different codes which might be on the Welfare Line column. But what happens if you use up all your Welfare Line chances? Very simple: We just move over and start putting them in the other columns, starting with Titans and moving forward, and you pay whatever token penalty the status calls for.

b. Then, the last column of all is "PURGATORY." Purgatory means the worst kind of trouble of all. You don't want to get any marks in the Purgatory column. For that means you are getting pretty near the end of the trail in this class, and maybe even in school altogether. Each mark in the Purgatory column means a specific step toward very serious problems for you. There are 9 steps in all. You will have to take these steps only if you haven't made things work for you in this class.

There are to ways you can make the Purgatory column. First: if you are constantly into some kind of misconduct which may not seem so serious, but which causes serious interference with teaching and learning in the class. Second: if ;you get into something so serious that it has to be dealt with instantly for your safety, or for the safety of someone else. In either case, the misconduct that would get you in Purgatory would be the kind that would require getting you out of the room.

NOTE TO TEACHER: Titles on the status chart are rather obvious in their implications. There are nothing but giants in Titan Territory! Terrans are earth dwellers. Square 1 is the lowest level at which students can continue to participate in class; F-Troop allows no participation. Thus, students move from heaven to earth, then to an island, then to near failure and on to failure itself. In other words, choices range from infinity to zero, depending entirely on conduct. All of these relate entirely to status in the classroom. Welfare Line is a self-explanatory status for students who, for whatever reason, are unemployed. Exile and Banishment are status levels outside the room. Exile should be considered as a level which can be handled by the teacher by placing students in some area of isolation in the classroom, in the shop, or on the project site. Banishment should involve detention hall, on-campus suspension, or whatever other such provisions are available in a given school. Limbo is just that: the student has moved from heaven, through all the status levels of earthly life, and is now somewhere between heaven and hell. In other words, the teacher has relinquished the fate of the student to the principal; the outcome is uncertain. Finally, the biggie: Purgatory. The student has started off in heaven and ended up in hell. Of course, in more practical terms, Purgatory is a provision for severe disciplinary measures where more moderate attempts have not been successful. The teacher should not be so bound to a plan of discipline that good judgment goes out the window. If students begin to anticipate intermediate steps in dealing with misconduct, they will wear a teacher out by outguessing the teacher. A minor offense committed once is not the same as the same offense after sufficient warnings and previous disciplinary measures. The teacher is at liberty to skip any intermediate steps which may not seem advisable under the circumstances. Little offenses, committed repeatedly, become large offenses, and should be treated as such.

NOTE TO TEACHER: Of course, policies governing student discipline vary from one District to another. The main thing is to have some projected plan of specific steps leading toward semester suspension. If misconduct has been properly documented, with all interested parties kept informed, teachers can usually get as tough as they need to keep order in the classroom. Also, it is a good idea for teachers to write up their plan of discipline and submit it to the principal for approval. That way, nothing takes anyone by surprise.

Token expenditures as part of penalties in a discipline plan relate closely to the real due process of the real justice system in the real world. This is a lesson that all students, and particularly handicapped students, need to

Let's look at each of these 9 steps:

1) Sit out 1 period of the class's 3 period session; letter to your parents; day's grade--"F."

2) Sit out 2 periods of the class's 3 period session; letter to your parents; day's grade--"F"

3) Sit out all 3 periods of class session; letter to your parents; day's grade "F."

4) Sit out all 3 periods of 2 day's class sessions; letter to your parents; "F" for grade both days.

5) Sit out all class sessions for 5 days; parent conference before returning to class; "F" for all 5 days; letter to parents.

6) On-campus suspension for one day; letter to parents; conference with principal before returning to class; day's grade--"F."

7) On-campus suspension for 3 days; letter to parents; conference with principal before returning to class; day's grade each day--"F."

8) Off-campus suspension for 1 day; letter to parents; conference with principal before returning to class; day's grade--"F."

9) Off-campus suspension for 3 days; letter to parents; conference with principal, at which time a request will be made to suspend the student from school for the remainder of the semester.

Everything we have discussed so far has to do with discipline in the classroom. With some few differences, the same plan will be in effect in the shop and on the field project. However, before we take a look at these differences, let's go back and review some of the things we have already covered.

learn—before they learn it the hard way. Perhaps the most valuable social skills lesson to be learned from a system of token fines is that not all misconduct is equally serious or as severely punishable. The inclusion of various status levels points up this lesson. In the work-simulation environment, as in any other, survival and thriving are contingent on having some of whatever is valuable in the environment. Rewards and recognition, status and prestige, achievements and possessions are all valuable to most people. If all these things are on the line when personal conduct is not acceptable, conduct has a way of improving.

Also, the status chart has a strong influence on the students day by day. In short order, it becomes very apparent just who is behaving and who is not. Sooner or later, if misconduct continues, the pressure of decreasing choices and opportunities has a strong influence on misbehaving students.

Many students love a good argument. But they find it impossible to argue with a felt tip pen in a fast draw holster. Marks on the status chart speak for themselves—decisively, authoritatively, and with finality.

NOTE TO TEACHER: In assessing token penalties for status level offenses, the number assessed is accumulative. In other words, the penalty for the Terrans level is 5 tokens, and the penalty for Cretans is 5 more for a total of 10, not 5 plus 10 for a total of 15. The rationale behind this has to do with the possibility of skipping some of the intermediate disciplinary steps if it seems advisable. For example, if a student has been rowdy over a period of several days, and successive check marks have not been effective, instead of a warning, then Terrans, etc., the first misconduct could be

9. We have been talking about the fact that, if you want to be somebody, you have to behave yourself. Before we can behave ourselves, we have to know what proper conduct is. Proper conduct may be many things in many places, but in the classroom, it is the kind of conduct that allows the teacher to teach and students, including yourself, to learn. Then, we discussed status as one way we are either rewarded or penalized.

The status we talked about had to do with status levels in the classroom. And we found there were several of these.

a. First, we talked about 5 different status levels that allowed students to remain in the classroom. These were:

(1) Titans, the Class A, Number One status of students who are trying to be somebody by behaving themselves.

(2) Terrans, no better than second rate status, with the penalties to prove it.

(3) Cretans, third rate at the very most. More penalties.

(4) Square 1. Low rate status; for folks who aren't trying very hard to be somebody.

(5) F-Troop. No rate; for folks who are trying very hard to be nobody. Who needs it?

b. Then, we discussed two status levels that require leaving the room. This means that sometimes folks act up so that no one wants them around. When that happens, we get shut out from a lot of the good stuff that is going on around us. Sometimes, when people turn us off because of the way we act, we say that we don't care, but we really do care.

Let's take another look at the two status levels that require us to dealt with by an F-Troop mark. If this should be the case, the penalty would be the same 35 tokens, just as if the student had built up to the F-Troop status by progressive steps. Also, students who habitually act up will use up their warnings and low penalty status levels at a rather rapid rate. When this happens, they move from Titans status to whatever the lowest penalty status level they have left. Again, the penalty is for whatever the status level calls for at the student's last check mark.

It is a good idea to note on the daily check sheet, or some other convenient place, the status level marks each students gets. That way, when tokens are totaled up at the end of the class session, it is easier to keep everything straight. Sometimes, if no notation is made, the penalty might be forgotten.

It is the accumulative effect that makes the status chart so graphically demonstrative of either success or failure. A Mark now and then can easily be overcome, just as occasional mistakes in real life seldom wipe anyone out. But a few students will eventually find themselves down to the wire for either passing the course or even staying in the course. When that happens, stick by your guns. There will be plenty of other people around to run interference for students, especially handicapped students, who are in trouble. If you force student to go through due process to get back in your course, or in school, being there will be more meaningful to them the next time around. In the end, this may be the only way you can help some students. Do it.

leave the room.

(1) Exile is the first status level out of the room. We get an "F" and a 50 token penalty. Usually, we get sent to Exile if we act up after we reach the F-Troop status level.

(2) Banishment is a lot like Exile, only more serious. It could include a trip to the principal's office. At least, it will get us an "F" and cost us 75 tokens.

c. Limbo is a status level that gets us sent to the principal's office for sure. Also, we get an "F" and a penalty of 100 tokens.

d. Two others that we talked about are Welfare Line and Purgatory.

(1) Welfare Line is what we get if we don't have a job assignment. If we don't use up all our Welfare Line chances, we don't get a token penalty, but we do get an "F". Once we use up all our Welfare chances, we start the Welfare Line code in another status level column. Then, we have to pay whatever penalty the column calls for.

(2) Purgatory is the worst status level of all. You have nine chances in this category, just like all the others. The more of these you use up, the worse your discipline problems will become. In this status level, your parents will be involved, and so will the principal. If you use up all 9 chances, you will be put out of building trades for sure. You might even be put out of school.

e. The best way is not get any status level marks of any kind. That way, you won't have to worry about it.

III. APPLICATION: Student Discussion.

A. Get students talking about social conduct and its influence on personal reward, recognition, and success.

1. What does natural law have to do with group rules or laws?

2. What happens to the person who refuses to conform to the rules of a group?

3. Are rules of acceptable conduct the same for any group setting? Why?

B. Draw some comparisons between acceptable conduct for school, church, or work and for a party, a pool game, or a camp-out.

1. Point out that rules are there in all cases, only different.

2. Get student reactions to the idea of social survival through acceptable conduct.

C. Review specific points of lesson content, particularly how the difference between proper conduct and misconduct may be known, how rewards and penalties for conduct occur, and the penalties connected with the various levels of the discipline chart.

IV. SUMMARY: Student Reinforcement. Bear in mind that, in school, misconduct is the type of thing we do which prevents teaching and learning, either for ourselves, or for other students. If you want the good things in life--at school or anywhere else--you have to be willing to behave yourself in a way to earn them. In this class, you need to conduct yourself in a way that you will not receive token penalties which will eventually cause you to be less and less successful.

1. First of all, keep your behavior within bounds which will allow you to stay in the group with the rest of the students. Any time you are sent out of the room, you are drawing an "F" for that day's grade.

2. Second, even in the group, stay out of F-Troop. Even in the group, that still means an "F".

3. Best of all, don't get any status level marks at all. That way, you know you are being successful and making the progress you need to make.

V. VERIFICATION: Student Evaluation. No later than next class session after this lesson, begin using the status level chart. At regular quiz, test, or exam intervals material from this lesson should be included.

b. Shop Discipline. Once the class moves out of the classroom and into the shop, the environment should be somewhere between that of a classroom and that of a real job situation, this environment being reflected in shop discipline. For one thing, the environmental chart will not be readily available; for another, the noise level might be too high for the teacher to spend a lot of time trying to correct student misconduct. More important, students, both regular and handicapped, who cannot conduct themselves responsibly are too immature to work safely in the shop. If such immaturity or irresponsibility becomes apparent, offending students should be sent out of the shop immediately. If the problem is not soon corrected, in order to maintain shop safety, students who persist in irresponsibility or immaturity should be removed from the program. Probably, a good rule to follow is something like this: First, the teacher should straightly and plainly warn the student, making sure that the student understands what the offense is and that the misconduct will not again be tolerated. If that offense, or a similar one, is again committed that shop period, the student could be set aside in the shop classroom or other convenient location for the remainder of the period. This disciplinary action could be equated with either Exile or fired and placed in Welfare Line, depending on the nature of the offense. Then, at the first opportunity, the incident could be recorded on the environmental status level chart. This manner of handling shop discipline is highly similar to how misconduct on the job is handled. The boss warns the worker; then, if the offense recurs, the worker is fired or disciplined otherwise, as the offense may require.

Since in the shop, the environment more nearly approximates that of work rather than the classroom, it should be expected that conduct and discipline should be more suitable to work than classroom. And perhaps the teacher should give serious consideration as to what really constitutes shop misconduct. Students will have more freedom of movement, more opportunities for conversation, thus, more personal responsibility for choices and outcomes. Before removing a student from the shop, the teacher should be sure that the misconduct warrants such severe discipline. First, no kind of insubordination would be tolerated on any job; therefore, none should be acceptable in the shop. Second, any kind of dangerous horseplay or other unsafe conduct would be grounds for dismissal; the same should be true in the shop. Third, serious conflict between workers, leading near or to a fight, likely would get both workers fired; the same should get students fired also. Fourth, any kind of activity which delayed work progress would be intolerable; so should it be in the shop, as well. Fifth, no employer would tolerate an employee's conduct which puts the company in a bad light; neither should the teacher tolerate a students poor representation of the school. Beyond these few ground rules, there is little else students can do which might be grounds for severe discipline while doing shop work.

c. Project Discipline. On the off-campus project site, the teacher becomes double responsible for maintaining discipline, and no irresponsible or immature misconduct should long be tolerated. Here, the environment should even more closely approximate the real work environment. And on any job, it is expected that workers are continually responsible for their own outcomes and instantly accountable for any misconduct. While the same five considerations listed above still define most firing offenses, on the project, discipline should be more instant and more severe. In this shop, the teacher is more like a technical instructor, and some classroom aspects are still present. On the project, however, the teacher is the boss--period. No lengthy warnings or explanations of rules should be necessary. A brief word or gesture should be sufficient. If work or gesture fails, the student should be fired instantly and placed on

Welfare Line or Banishment, as the offense may require. Any further misconduct should result in the teacher's shutting down the project, returning to campus, and remanding the student to the principal--a Limbo offense. The incident should be recorded on the environmental status level chart and logical outcomes allowed to run their course.

Of course, in the classroom or shop and on the project, penalties and consequences for misconduct should be balanced by recognition and reward for good work. Again, this exactly parallels the real work environment. No boss is worth his salt who looks only for reasons to fire workers. Happy contented, satisfied workers do good work and lots of it. They get along, cooperate, and fit themselves in. Good supervision sets the stage for this kind of production and success for all concerned. Highly motivated students, just like highly motivated workers, do not worry about getting disciplined or fired. They strive for excellence, and they expect, and should receive deserved raises, promotions, or whatever other recognition or reward they are due.

Discipline, then--whether for classroom, shop, or project--requires a far broader definition than exacting penalties for infractions of rules. Instead, real discipline is more akin to the true description: discipleship, or a voluntarily chosen way of life. Until the teacher moves the class beyond the babysitting stage and gets the students involved in individually and personally sustained activity, very little drill simulation will be realized. In the classroom, the teacher is able to take more intermediate steps in dealing with student misconduct. In the shop, most intermediate steps must be eliminated. On the project, all such child's play must be left behind. There, in the true work-simulation environment, all students--both handicapped and regular--must concern themselves with two vital elements: to keep the job they were given, and to strive to get all out of that job they can. Most will do the first on a regular, daily basis; a few will do that and more. Those few will strive for excellence, for leadership, for recognition and reward. For all, to get a job is not enough; they want everything their job has to offer. These deserve special recognition and reward from their teacher; they will certainly get the raises and promotions available on their real jobs in the future. To get a job, to keep a job, to get a raise: These are all positive aspects of discipline--discipleship, if you will--both in a true vocational course and in the real world of work.

Item 7: Be Responsible and Be Somebody--A Social Skills Lesson Plan.
FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify student responsibilities in the classroom, the shop, and on the off-campus project; be able to distinguish between responsibility differences in the three program areas; and be able to relate similarities between student responsibilities in school and adult responsibilities in the larger world.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn that, while proper conduct in the classroom, the shop, and on the project may differ in some respects, you are responsible to know what is expected of you and then to do that on your own initiative.

Another important point of this lesson is that you will learn how similar student responsibilities in school really are to adult responsibilities at work, as well as in all other aspects of adult life.

It is to your advantage, then, to get as much out of this lesson as you can. For, as we get further along with our program, you will be expected to be responsible for whatever success you have day by day. Also, you will be subject to being tested over the material in this lesson.

II. PRESENTATION: Student Information. As a general rule, people are successful in direct proportion to their individual willingness to be responsible for personal outcomes. When we act irresponsibly, we make someone else responsible for what happens to us and for us. Many times, when we turn our responsibilities over to someone else, we are not very satisfied with the decisions and choices they make for us. However, the only way we can avoid this is to make good decisions and choices for ourselves. One function of school is to teach personal responsibility to students. You need to know what you are responsible for in the classroom. In a vocational course, you need to know what your responsibilities are in the shop. And in a building trades course, there is another set of responsibilities for you on the off-campus course project. In all three cases, these responsibilities differ in some respects. Nevertheless. how successful you are depends on how responsibly you conduct yourself. Also, out in the real world, you will find that responsibilities for adults are not a lot different from student responsibilities in school. Many adults find little success in the real world for the same reason many students have little school success: In both cases, irresponsibility is the cause of failure. So, if you don't want to live out your life as a nobody, then, be responsible and be somebody.

A. KNOW THE DIFFERENCES BETWEEN CLASSROOM RESPONSIBILITIES AND SHOP RESPONSIBILITIES.

NOTE TO TEACHER: Aside from the program orientation content of this lesson, the larger intent here is to instill in each student, regular and handicapped, an overall sense of personal responsibility for individual outcomes. With some handicapped there is a tendency to consign outcomes to the realm of mere chance or luck, or to regard outcomes as the whims and fancies of authority figures, and beyond the control of subordinates. This attitude is very pronounced among some handicapped and must be dispensed with before any real or lasting success is possible.

Of course, like all else in an effort to correct attitudes and conduct through environmental influence, consistent, day to day exposure is the key. As the teacher, a crucial role for you will be to outline individual responsibilities and to cause success to

1. The main responsibility of students in either classroom or shop is to allow the teacher to teach and students to learn.

a. In the classroom, this means sitting in a desk and giving your undivided attention to the teacher and the lesson.

(1) You need to avoid unnecessary talk, noise, and moving around.

(2) In the classroom, then, the teacher should be allowed to be totally in charge.

(3) This is just as true in a college classroom for adults as for younger students in a classroom.

b. In the shop, the setting is different, and your responsibilities are different.

(1) You will be up, moving around, and talking more than in the classroom.

(2) In other words, your shop

hinge upon responsible performance of assigned job tasks. Daily, you will need to provide ample recognition and reward for responsible performance, while providing suitable penalties and consequences for irresponsibility. Under no circumstance should you allow handicapped to be shielded from logical and natural consequences and outcomes. When penalties are exacted, handicapped will tend to shift the blame for these to some imagined unfairness on your part. However, in time, they will come to recognize and appreciate consistency on your part. Once handicapped recognize the futility of attempting to shift responsibility for their outcomes to you, they will come around to accepting their own responsibilities. Unless this essential task on your part is accomplished, no amount of skills training you to provide them will ever do them any good.

Surely, by now, you have recognized the affective tone, or emotional appeal, of these social skills lessons. It is absolutely necessary that you get handicapped emotionally involved in the program. Sometimes, the emotional responses of handicapped may be anger, resentment or hostility. Nevertheless, once you work them through these negative emotional responses, they will be ready to respond with more positive affectiveness. For many handicapped, the only emotions they have ever experienced are negative. They have learned that anger makes the juices flow. For them, this is preferable to an emotional vacuum. At the same time, they have not learned how to respond to social stimuli with the more positive affectiveness of joy, satisfaction, sharing, accepting blame, and the like. However, if they are to function successfully as participants and contributors in our world of work, they must learn how to feed their emotional lives on something other than negative emotionalism. Hence, with some handicapped, things

responsibilities will be more like real work in the real world.

(3) Therefore, your conduct should be more like real workers on real jobs.

(4) However, in the shop, the teacher will be giving more instructions and skill demonstrations than you would receive on a real job.

(a) This means it will be something like a classroom also.

(b) Thus, you will have some classroom-type responsibilities, such as: paying close attention, trying to learn, allowing the teacher to teach, and allowing other students to learn.

(5) Also, there will be a need for more safety awareness and practice in the shop than in the classroom.

(a) Again, this is more like real work than school.

(b) But again, the teacher will be teaching general shop safety, as well as specific safety for a variety of tools and equipment; therefore, you have some responsibilities very much like those in the classroom.

2. A secondary responsibility, then, in both classroom and shop, is to fit your conduct to your situation.

a. The classroom is entirely teacher-student oriented; hence, your responsibility is to be a student.

b. The shop is a part-work/part-study situation, calling for a combination of student/worker conduct.

c. In fact, one responsibility we have always is to fit our conduct to our situation.

(1) This is true in the adult work, as well as in the student world.

may have to get much worse before they can get any better. The main thing for you is that you don't get discouraged with what seems like negative results of your efforts. In time, most handicapped will respond positively to your efforts to make them conduct themselves responsible. A few may never come around. It may become necessary for you to move them on to more appropriate settings for their particular educational needs. You should not consider this as failure, either for yourself or for those few students. As you already know, vocational education is not for every student, either regular or handicapped.

B. KNOW THE DIFFERENCE BETWEEN SHOP AND PROJECT RESPONSIBILITIES.

NOTE TO TEACHER: In your attempts to make building trades as much like the work world as possible, you need to watch out for responses, attitudes, and conduct which make work success impossible. Among these, the most significant are: conflict with peers and authority figures, emotional detachment from the work environment, and personal disorder or rowdiness. Some handicapped tend to display these. Along with noting the positive accomplishments of students day by day, you should keep an eye out for negative reactions as well. As already noted, the environmental charts and check sheets provide for tokens to be earned for job performance. To supplement these, you need a consistent way to reduce earnings for withdraw or disruptive conduct. Detachment or perfunctory performance of assignments should not result so much in penalties as in earning reductions. On the other hand, conflict and disorder should be penalized with token fines. This dual method reaches out beyond the work environment and incorporates principles of the larger social environment of community life. Certain types of

(2) In building trades, we have the opportunity to move even closer to the adult world of work than in the shop.

(a) That opportunity to experience work situations requiring more personal responsibility is on the field project.

(b) Working on the project requires more work related responsibilities and less classroom type responsibilities than either shop or classroom.

1. Your main responsibility on the project is to perform your assigned work as nearly like a real job situation as possible.

a. That means that the teacher is more like a construction job boss than either a classroom teacher or a shop instructor.

b. And it means that you are more like a construction worker working for pay than a student in either classroom or shop.

c. Your responsibility is to perform your job assignment in such a way that your finished work is a part of a house that must be sold on the competitive real estate market.

(1) In other words, on the project, school is out!

(a) In the classroom, you learn construction related technical knowledge.

(b) In the shop, you practice and drill in construction related skills.

(c) And on the project, you put knowledge and skill together in real work.

social conduct simply are not acceptable to the majority of law-abiding citizens, and appropriate checks and balances of penalties are provided to discourage unsuitable social conduct by individuals who commit offenses which disrupt or disturb the common community peacefulness. Since vocational education provides input for the totality of life, the vocational environment should be broader than the work world, and should include aspects of all areas of human life. Thus, in awarding tokens for job performance, you should use two distinct methods to limit earnings, based on performance: (1) reductions for withdrawn or detached conduct, and (2) fines for disruptive conduct.

1. DETACHMENT REDUCTIONS: Token reductions should begin with the job interview each day at roll check. Poor attendance, tardiness, and general unprepardness are types of detachment or withdrawal. In the token economy system herein outlined, each student may earn up to 63 tokens daily, with 6 of these to be earned in the daily interviews, and 4 of which must be earned to get a job assignment. This leaves 57 tokens available to be earned, either by keeping a job or getting a raise. Reductions for getting a raise are automatic, based proportionately on tokens otherwise earned. Token reductions for keeping a job should be prorated, as follows:

C. NOTE THE SIMILARITIES BETWEEN COURSE PROJECT AND WORK WORLD RESPONSIBILITIES.

NOTE TO TEACHER (Continued).

a. SAFETY HAZARD REDUCTIONS. Earnings--6; Reductions--1-6.

b. UNPREPAREDNESS REDUCTIONS. Earnings--6; Reductions--1-6.

(2) Your responsibility is to learn, to practice, and finally, to do.

2. Then, another very important responsibility is that you conduct yourself to be on your very best behavior.

a. Remember, students off the campus are representatives of the school before the entire community.

b. Also, you represent a special branch of learning--vocational education.

c. Besides that, you represent our own building trades program.

3. You need to bear in mind that you are among a privileged few students who are allowed to leave the school campus during the school day.

a. And privileges always carry with them heavy responsibilities.

b. If we don't exercise our privileges in a responsible way, we are very likely to lose them.

(1) So, with the privilege of being allowed to work off campus, there is the responsibility to handle that privilege in a mature, grown-up way.

(2) For the work we do and the privileges and responsibilities we have, going off-campus and out into the community, are very much like adults going out to work on real jobs for real pay.

1. We are responsible to transport tools and equipment to the job.

a. People who work on real construction jobs also are responsible for having what they need to work with.

b. Building trades is not kid stuff, but serious grown-up business

2. We are responsible for our

c. POOR ATTITUDE REDUCTIONS.
Earnings—6; Reductions—1-6.

d. NON-PRODUCTION REDUCTIONS.
Earnings—9; Reductions—1-9.

e. NON-MAINTENANCE REDUCTIONS.
Earnings—15; Reductions—1-15.

Sometimes, it is easier to note lack of production than to award for amount of production. One way is to start students out with the full 63 tokens, then reduce earnings in appropriate categories as you note assignment detachment that affects performance or production. By the end of class session, you then will have a clear indication of individual student earnings on which to base grades for the day.

2. DISTURBANCE PENALTIES: Some types of conduct have no place in the work setting, or even in most areas of society. Individuals who persist in such conduct have to live with more than just reduced standards of living; they have to live with penalized circumstances. Authority figures will not tolerate much conflict among peers when they are in charge; they will tolerate even less where they are personally involved. The work situation, as well as society at large, has no provision to allow much conduct which is so rowdy or disruptive as to upset the status quo. It is not by accident that "J. P." identifies a community court judge correctly called Justice of the Peace. The main function of Justice Courts is to penalize citizens who disturb the peace. Properly used, the environmental status level chart herein described accomplishes the same purpose. Token penalties for environmental disturbances should be prorated, as follows:

a. DISORDER OR ROWDINESS.
Depending on severity of offense—Titans...F-Troop—Warning to 35.

personal conduct off the campus and in the community.

a. Just as construction workers must be responsible citizens of the community.

b. And responsible patrons of the school in the community where they live.

3. And we are responsible for building a house which must be sold and in which people will live.

a. There's nothing make-believe or Mickey Mouse about what we do on a building trades project.

b. It's real work, which must be done in a skillful way by responsible people doing responsible jobs.

c. As a finished product, our project will be no different from a house built by adult workers working for pay.

(1) That calls for real responsibility, for real skill [illegible] real maturity.

(2) Not just anybody, adult or student, can build a whole house.

(a) It takes somebody who knows something, who can do something, who takes pride in personal achievement, and who can assume responsibility.

(b) It takes somebody who is not just anybody, not just a nobody; it takes somebody who is somebody.

4. So, to be successful in building trades, you must be willing to take on some personal responsibility.

a. Responsibility to be a willing student in the classroom.

b. Responsibility to work hard at skills practice and drill in the shop.

b. PEER CONFLICT.
Depending on severity of offense—Cretans...Limbo—10 to 100.

c. AUTHORITY FIGURE CONFLICT.
Depending on severity of offense--Square 1...Limbo—20 to 100.

Of course, sometimes when you attempt to deal with these infractions, students will elevate the problem to some higher level of offense. When this happens, the penalties must increase accordingly.

c. Responsibility to take on the serious business of building a real house—just like real, adult construction workers.

(1) To do something not everybody or just anybody can do.

(2) But you can do it, because you're not just anybody.

(a) You accept responsibility.

(b) If you will be responsible, you will be somebody.

III. APPLICATION: Student Discussion.

A. Get students talking about personal responsibility and its influence on personal reward, recognition and success.

1. Does irresponsibility have anything to do with the penalties students get in the classroom? Why?

2. In college, do students still have to behave themselves to stay in class?

3. As adults, do people have more or less responsibilities than as students?

B. Draw some comparisons between classroom, shop, and project responsibilities and adult responsibilities in the real world.

1. Point out that in all cases, people who act most responsibly usually receive the greatest rewards and recognition.

2. Get student reactions to the relationship between responsibility and success.

C. Review specific points of lesson content, particularly the differences between classroom, shop, and project responsibilities, as well as the similarities between school and work responsibilities.

IV. SUMMARY: Student Reinforcement. Bear in mind: In the classroom, you should be responsible for just about the same things you would be responsible for in any other classroom, in the shop, you will be responsible for a variety of personal and individual safety, security, and maintenance assignments, as well as regular student responsibilities; on the project, your responsibilities will be just about the same as those for adult workers on a real job for real pay.

V. VERIFICATION: Student Evaluation. No later than the next class session after this lesson, begin making students accountable for carrying out their individual responsibilities in classroom and shop, as well as on the off-campus project. At regular quiz, test, or exam intervals, material from this lesson should be included.

Item 8: Be Your Best and Be Somebody--A Social Skills Lesson Plan.

FOR BOTH REGULAR AND HANDICAPPED STUDENTS

AIM: The student will be able to identify characteristics of student excellence, as well as be able to relate similarities between outstanding school achievement and successful adult achievement.

I. PREPARATION: Student Motivation. The most important point of this lesson is that, in it, you will learn that, while you may be able to get by with less than your best effort in school, that same effort may not be enough to keep you from getting behind in the adult world.

Another important point of this lesson is that you will learn the importance of doing your best at every job assignment you get. Statistics show that, almost without exception, people who do best in school also do very well later in life, after they get out of school.

You would do well to pay attention to this lesson. For in this class, you will be expected to do your very best every day. Also, later on, you will be tested over the content of this lesson.

II. PRESENTATION: Student Information. People who do not do their very best can never be their very best. On any football team, there may be two people who gave the same size, strength, speed, and experience, yet on may be a super star while the other sits on the bench. Why is that? Why is one a better player? Probably because, in most cases, one player tries a little harder to be the very best. Now, our purpose here is not to be football players, but the same thing is true in the construction trades. People who write pay checks don't care how tall you are, how much you weigh, or how fast you can run. What they want is for workers to do their very best work every day. And those who do, get the reward and recognition they deserve for doing good work. So, if you're not willing to be just anybody—or nobody--be you.

A. BE YOURSELF.

NOTE TO TEACHER: This lesson concludes the series of social skills lessons. In working with handicapped students, you will find time spent in the classroom discussing social values, attitudes, and behaviors of great value. Although not all handicapped students come from less than ideal social climates, many do. Whether this reality stems from heredity or environment is unimportant. Probably, both contribute to the problems. In any case, before some handicapped can benefit

1. Make your own decisions. There is always someone around who would like to get you all stirred up, then laugh at you when you get in trouble.

a. Who says you have to prove to every one on this campus how tough you are.

b. The graveyard is full of folks who let other folks punch their buttons and make their decisions for them.

c. We don't like for other people to think we are a coward.

substantially from the course skills or technical training, they need to understand the reasons for the training. This can be accomplished only as they come to recognize the negative effect poor social conduct brings to bear upon personal potential for success.

NOTE TO TEACHER: These notes are an effort to get you personally involved with your handicapped students. Working with these students will not often be easy. But the successes you have with them may be some of the most rewarding moments in your life as a teacher. Life is not kind to those of us who are different. Indeed, it is possible that this reality reverts back to the most basic law of nature and of society: the survival of the fittest. However, as human beings, we recognize the worth of each individual in our society; in fact, that is probably what makes us human. At any rate, without the help of caring, sustaining, nurturing professionals, many handicapped individuals will never be able to survive in the society as independent, self-supporting, contributing members. Many handicapped people have a hard row to hoe. As sad as it may be, coddling them won't help them. However, even when you hold their feet to the fire, you need to be sure that it is out of a true affection for them as teacher to student, as well as care for them as one human being to another. You need to insist that they can trust you to be on their side. At the same time, you need to be sure that you truly are on their side, and that you trust their best instincts to come out in a measureable level of success for them.

Statistics show that in many cases, handicapped individuals come from families with long histories of similar problems. Many of these students come from homes where welfare is a way of life. Others have

--but sometimes we have to decide for ourselves whether or not we have to prove ourselves.

—for example, in some cases, we have to decide whether it takes more courage not to fight than to fight.

—Or sometimes, we have to decide if it's worth it or not to take a dare. A lot of folks are in jail or prison because they just let somebody else decide for them what they had to do to prove they were brave.

d. Let's talk about some specifics:

When should you fight?

—Only when your own life or the life of those for whom you are responsible is in danger.

—Only when you can't get away, and there is no other choice.

—Try this on for size: If it's not worth dying for, it's not worth killing for. And if it's not worth dying or killing for, it's not worth fighting for.

--Any other kind of fighting is nothing more than a game we play with each other. And if you are going to play the fight game, you ought to turn pro, so you can make some money and be somebody.

—And remember this: Hundreds of millions of people—people who are somebody—live out their entire lives without ever having to fight or taking a dare.

—Anybody can fight; even a nobody can fight. But it takes somebody with some guts and backbone to think enough of themselves to walk away from the nobodies.

2. Choose your friends well. If you hang around with people who are nobody, you will be a nobody.

parents or other close kin who are involved in criminal activity, with some family members already in prison. In many instances, attitudes in the homes toward commonly accepted social values are much less than ideal. In these cases, you will be fighting uphill all the way. But if you can get these students to break the cycle and get out into the work world on their own, you will have won more than a battle; you will be winning a war. If you lose, these handicapped students will be the casualties. And if you lose, the rest of us are losers along with you.

NOTE TO TEACHER: You might find it beneficial to seek out the help of a Special Education counselor who can put you on to additional social skills development, particularly audio visuals. There is a great deal of helps and aids available for handicapped students, and don't sell it short for your regulars, as well. On rainy days, when the shop is clean, and need a good film for your class, the Special Education department might have just what you want.

B. BE YOUR BEST.

NOTE TO TEACHER: In many instances, even regular students who enroll in vocational programs need strong assistance in the development of good social skills. Probably, if you provide anything in this area for personal development, you will not need to make any special allowances for handicapped students.

Usually, students don't like to hear teachers talk about social values, but someone surely needs to give them guidance in this area. If you can ever gain their trust, and convince them that you are not preaching to them or talking down to them, you will have some success with this kind of material. Probably, a good approach is to

a. People who are on their way up in this world don't hang around acting like criminals.

b. And people on their way up don't have time to hang around with others who act like criminals.

c. You can't have it both ways. You can't impress folks who write pay checks and folks who may never earn a pay check at the same time.

3. Feel good about yourself. If you can do that, you can stand a little ridicule from individuals who poke a little fun at you.

a. You see, the only way some folks can feel good about themselves is when they can drag somebody else down to their level.

b. Don't let that happen to you. Make your own decisions, choose your friends well, and feel good about yourself.

c. In other words, be yourself.

1. Improve your mind by good study habits.

a. Learn something about the kind of world you live in.

b. And learn what it takes to get ahead in the kind of world you live in.

c. The more you learn, the better decisions you can make in life, and the better your life will be.

2. Build a good strong body by wholesome exercise, good eating habits, and proper rest.

a. Hard work right now, at this stage in your life, will build a body that will serve you well all your life.

avoid "never" and "always". From you perspective, drugs, drinking, and other poor social behaviors begin to be problems when they interfere with workers holding their jobs. Also, for practically all students in the public schools, because of their age, drinking is against the law. Drug use is against the law—period. Use these facts as a basis for some of your lessons in these areas. In the final analysis, these practices come down to choices and consequences, anyway. You will help them make better choices, simply by confronting them with choices. Be prepared for lots of feedback when dealing with drugs and alcohol.

NOTE TO TEACHER: Writers, composers, and artists may use alcohol and drugs in some context of their social lives. Some probably do. However, if they continued success in their fields of creativity, they lay off the stuff long enough to do their work. This bears out some of the earlier observations here about "never" and "always". No one can dispute the statistics which reveal the terrible loss in society from alcoholism and drug addiction. However, all of us know people who are handling it—at least for the present—and functioning in society.

C. BE SOMEBODY.

NOTE TO TEACHER: Many students in school these days—both regular and handicapped—have had little to nothing in the way of physical training. They are physically weak, short-winded, and poorly coordinated. While you won't be able to provide a complete program of physical education, you can see that all of them get exposed to some hard work. If you have any student three hours a day for two years, that student ought to be in better physical condition upon

b. Eat good, nourishing food, and avoid too much junk food. Junk food turns your body into junk.

c. Proper rest means enough rest, which really means two things: not too little, and not too much.

d. For all three areas—exercise, diet and rest—regulate yourself; put yourself on a schedule; stick to it.

3. Keep your body strong and healthy by wholesome social habits. Remember—we are talking about being your best.

a. People are never their best when they are stoned out of their minds with drugs or alcohol.

b. The music you listen to is composed by people with clear heads.

c. The movies you see, the TV shows you watch, and the books you read are all produced by people who have enough good sense not to mess up their good sense.

d. Don't forget: If you want to be somebody, you need to be your best.

e. You are your best when you have a well trained mind, a strongly developed body, and healthy, wholesome social habits.

1. Behave yourself the way you know the people who hand out rewards, recognition, and paychecks expect.

a. Never mind what the nobodies think. What would you have if you had everything they could give you? They don't have anything you need, or should even want.

b. We live in a civilized society. We are expected to act civilized. If we are going to be somebody, we must be civilized, also.

2. Be responsible for more than just

leaving your program.

Don't apologize for the higher value of our society. As a teacher in the public schools, you represent to your students the will of the majority of people in your school district. Advisory committee representing patrons of the district work closely with the school board to develop policies for students in the school. These policies spell out what most people in the district want for their children at school. You have a moral, ethical, and professional obligation to uphold these policies. Pass this on to those in your class who believe that a few old gray-heads force what they want on everybody else. That is just simply not true. Students need to know that.

NOTE TO TEACHERS: Willingness to accept criticism is essential to success on a job. Students who don't learn this in school will have to go through the painful process of learning it the hard way on the job (or jobs; they won't be able to keep a job until they learn to accept criticism). Probably, you can't overemphasize this point. Handicapped students, oftentimes are highly sensitive and resistant to criticism. Give it anyway. Nobody ever said any of us have to be perfect. There's nothing wrong with making mistakes. The problem arises when we refuse to face up to the mistakes, and try to correct them.

One very good aspect to working with handicapped, they rarely hold grudges. You may have some rather volatile confrontations with some of them, but they'll be back in a good humor the next day. One day, one by one, they'll realize you truly are their friend. When that happens, you'll be the richer for it. Handicapped individuals make very good and loyal friends, once they learn to trust.

enough to get by; try to get ahead. Give the important things your best shot everyday.

a. You might get by in school by doing your work about 70% correctly.

b. But there is no job in the world you can keep by doing your work right only 70% of the time.

—Would you let a surgeon operate on you who lost 30 patients out of 100?

—Would you fly on an airplane with a pilot who crashed 3 times out of 10?

—Would you hire a plumber whose work leaked 30% of the time?

—Or would you buy medicine from a drug store where 3 times out of 10 the druggist filled the wrong prescription?

c. We expect the prople we do business with to do it right 100% of the time. Why should other people expect any less of us?

3. Be willing to accept criticism from people who are trying to help you.

a. We can never be somebody unless we are willing to let someone help us to be our best.

b. And we can never be our best unless we trust someone enough to accept good constructive criticism when we don't do our best.

c. Remember: It takes a good friend to have the courage to tell us when we need to improve.

d. And that's what being your best means: doing your best, being your best self, giving it your best shot everyday, and letting folks who care for us do better when we need to do better.

4. So be yourself, be your best, and

be somebody.

a. Make good decisions and choices, and choose your friends well.

b. Develop your mind by studying, build a strong body by exercise, diet, and rest.

c. Keep your body strong and your mind clear by good social habits.

d. Behave yourself, be responsible, and be willing to accept criticism.

e. If you will do all this, you will feel good about yourself, and rightly so; you will be your best, and you will be somebody.

III. APPLICATION: Student Discussion.

A. Get students talking about peer associates, social habits, inter-relational conflict, and how responsible people handle all these things.

1. Is it worth fighting about if somebody says something about your mother?

2. Does it take any courage to do something you're not afraid to do?

3. Is it possible to act like a criminal and move up to success in a civilized society? Do people in a civilized society admire that kind of conduct?

B. Draw some comparisons between responsible adult conduct with respect to work, family, and community duties, as compared to responsible student conduct at school.

1. Point out that students in school who get the most recognition on campus have very responsible personal conduct.

2. Point out that famous athletes and movie stars encourage young people to be socially responsible through good school, community, and social conduct.

3. Get student reactions to the lesson pattern for social success.

C. Review specific points of the lesson content, particularly: feeling good about self, striving for individual excellence, and earning the right to recognition and reward.

IV. SUMMARY: Student Reinforcement. Remember, if you want to be somebody, don't hang around with nobodies. The world is full of folks who would like to hold you down and keep you back. Leave those kind of people behind. Get ahead by giving the best things in life your best shot every day. Study hard, work hard; develop your mind, and build up your body. Eat right, stay away from beer, liquor, drugs, and stay right. Let people help you who can help you, even if it means they might say some things you'd rather not hear about yourself. Make good decisions, choose your friends well, behave yourself, and be responsible for good things happening for you. Remember: Some people make things happen, some watch things happen, and others wonder what happened. If you intend to be your best and be somebody, you will be one of those who makes things happen.

V. VARIFICATION: Student Evaluation. Beginning immediately, insist on students assuming personal responsibility for their outcomes every day. Offer praise and compliments when they are deserved, but accept no shoddy performance as any student's best. At regular quiz, test, or exam intervals, include material from this lesson.

3. Student Success Distinguished from Student Failure. In the work-simulation environment, as in any other, through a system of defined rewards and penalties, success is clearly distinguished from failure. That is to say, between a token economy system and a plan of discipline integral to the environment, determinations can be made whether or not students are thriving, surviving, or becoming extinct. The final evaluation, of course, is a matter of official documentation of what the educational process typically measures. This documentation is periodically summarized on students' report cards, and is simply grades, conduct, and attendance. No other measure is used in any other social environment. Successful people in any social setting are no more or less than present, productive, and socially acceptable. The teacher's token economy system and discipline plan are symbols of real entities in the real world. And just as with the real entities,they are the tools with which the teacher helps students make good things happen for themselves. In the classroom-shop-project continuum, there is a work-simulation environment which is enhanced by and structured around the discipline plan and token system. In any environment, survival and thriving are contingent upon having some of whatever is valuable in that environment. Those who conduct themselves according to the commonly accepted systems of rules and laws receive some of what is valuable. Tokens are that valuable asset in the token economy system. Unless certain and sufficient numbers of the tokens are acquired and available for purchases of items, students can neither thrive nor survive in the environment. The token system provides a basis for measuring success in a way meaningful to students. The discipline plan provides the means by which success is distinguished from failure.

By associating grades, commodities, and penalties with the token system and the discipline plan, the teacher will have developed a ready-made environment for evoking the best efforts from all students in the program, both handicapped and regular. Through tokens, the teacher can give individual recognition which fosters weekly competition among students. Each week, students will earn a certain number of tokens, very similar to gross paycheck earnings. However, some students will lose some tokens through fines for misconduct. After tokens are added up and fines deducted, but before deductions for grades and purchases, each student will have a certain number of adjusted gross tokens earned. these adjusted earnings can be used as a means for recognizing the student of the week--the student who earned the most adjusted gross tokens. A simple announcement each Monday, accompanied by posting the winner's name on the wall, will be a few minutes well spent for motivating students for the coming week. All students, and especially handicapped students, respond favorably to this kind of recognition by their teacher and their peers. And whatever opportunities some students--both handicapped and regular--ever get for school competition and recognition will come through their vocational classes. Nevertheless, as valuable as this opportunity may be, the teacher should bear in mind and pass on to students one very important truth: It is not the function of education—vocational or otherwise—to teach students how to be students. Rather, the real function here is to teach students how to structure their lives for surviving and thriving in the larger environment of the real world. Any function of any aspect of education which falls short of this reality has no rightful place in the teaching and learning process. Thus, any skill, whether it be scholastic or vocational, is really a social survival skill, or it is no skill at all.

For better or worse, any social environment rewards those who chose to conduct themselves in a manner which the environment deems to be good, and penalizes those who conduct themselves otherwise. Now, it may be that some, for whatever reasons, choose other ways to conduct themselves and other things to value. There may not be anything wrong with these choices; indeed, the world might be much the poorer without these individuals who march to a different drummer. But those who would make such choices need to be taught the hard consequences they surely bring to themselves. Not many who make such choices survive; none thrive. For most, under most circumstances, the prescribed path to success is clear: Find out what the environment deems good, and go for it. Any other path, socially speaking, leads only to failure. Few people are strong enough to survive, let alone thrive on the unbeaten paths of life. In any event even those who choose other paths can make informed choices, and make them better, when they come to understand their whole personal spectrum of individual options and alternatives. Knowing all the facts of life never hurt anyone's chances for learning some sought-after larger truth. A vocational course may not be the best place to discover truth. Facts, now that's a different story. The facts boil down to this: Success and survival in a social environment come to those who know what significance others deem to be valuable, good, and worthwhile, and knowing, are willing to discipline themselves—to structure their lives—to reap the rewards of their own good efforts. One route to those rewards is successful participation in a building trades program.

B. VERBAL OR COMMUNICATION SKILLS INSTRUCTION.

As unfortunate as it may be, most handicapped students—even mainstreamed handicapped—may have to live out their lives without being proficient readers and writers. Also, the building trades teacher is going to have to live with that reality when providing instruction and training for handicapped students. To further complicate the problem, many building trades teachers have neither the credentials nor the training to teach reading and writing as such. There might be the temptation to despairingly wonder how students, at this late date, can learn what experts have not been able to teach them in eleven years or so of previous school enrollment. The answer is, simply they likely cannot be taught how to read and write better. By the time most students, handicapped or regular, reach building trades programs, their reading and writing skills are about as good as they will ever be. Now, this does not mean that the teacher cannot help handicapped in the areas of reading, writing, and the other verbal or communication skills of speaking and listening. It means, simply, that the teacher's time will be better spent helping them learn to use the skills they already have to better advantage. The same lack of structure handicapped reveal in their daily lives is vividly demonstrated in their deficiencies in verbal or communication skills. Therefore, the teacher can best help by teaching methods by which students can better structure the verbal and communication skills already in place. Also, since few regular building trades students are at the head of their reading and writing classes, they, too, will benefit from the instruction developed for handicapped.

Students who have reading and writing problems usually have attention and listening problems also. Now, whether these problems stem from hearing impairment or from congenital attention span problems is beside the point. Students who don't listen are no better off than those who can't hear, can't understand, or can't remember. Therefore, rather than spend precious shop time trying to do what experts have not been able to do, perhaps time spent in teaching verbal skills calls for a new approach. Why not rather teach students the basis of notes, charts, and outlines?

1. Lecture Notes as Verbal Skills Instruction. Since poor verbal skills are by no means limited only to handicapped students, a logical conclusion to draw is that the problem may have little to do with physiological or psychological handicaps. Instead, the problem may be that students no longer get the reading and writing rote drill students received in the past. Audio-visuals do not enhance the development of verbal skills, indeed, they may actually deter development. Now, it may be that the written work is obsolescent—going the way of the smoke signal. If so, bring on the audio-visuals; away with pen and ink! If not, then some kind of rote drill is still essential, even if not in fashion. A good beginning might be to introduce students to lecture notes. Two types of aids lend themselves to student note-taking: the chalk board, and the overhead projector.

a. Student Notes from Chalkboard Lectures. The idea here is to reinforce retention and recall of instruction, not so much from the lecture itself, but from the students' writing of the lecture notes. Students with hearing or listening problems will get very little from the spoken lecture. On the other hand, they might retain and recall much of what they are required to write down word for word. In preparing for the lecture, the teacher should write out the notes in some detail before the lesson. Then, during the course of the lecture, students should be required to write down and turn in everything the teacher writes on the chalk board. At the conclusion of the lecture, a combination recognition and recall quiz should be given both to reinforce the lesson information and to help evaluate the students' actual learning. Besides the benefit of improving retention, recognition, and recall of the information, there is the added benefit of regular writing exercises for the students.

b. Student Notes from Overhead Projector Lecture Outline. The overhead has both advantages and disadvantages in comparison to the chalk board. Otherwise, the methods are the same. The advantages are in the fact that teacher does not write during the lecture, and that the outline format may be neater and more precise. Disadvantages stem from the fact that non-listeners will listen to even less of the lecture itself, if more of the written assignment is in evidence. Instead of listening, they will be copying the notes. On the other hand, they might not listen anyway.

In either case, whether chalk board or overhead projector, the teacher should present the lecture notes in cursive writing, clearly and precisely outlined, and with careful attention to indentation, punctuation, capitalization, and spelling. Also, information in the outline or notes should contain enough information to provide complete coverage of the subject matter, meaning, of course, that not much material can be covered in any one exercise. The really important thing here is that students be held on task until they get the exercise right. This may mean doing the work more than once. Further, with this kind of drill, students will eventually develop the hand, eye, and neurological coordination to handle more and more such assignments. Somewhere along the line, they will be able to move from rote drill to more creative reading and writing assignments such as charting, outlining, and even some composition. A partial sample of lecture notes for chalk board or overhead projector follows.

COMPARATIVE BEHAVIORAL CHARACTERISTICS OF CONSTRUCTION MECHANICS AND WORKERS

I. AREAS OF COMPARISON.

A. Associative Characteristics.
B. Cognitive Characteristics.
C. Psychomotor Characteristic

II. DEFINITIONS OF TERMS.

A. COMPARATIVE: Examination or study of properties or parts which are similar or alike in two or more persons, places, or things.

B. BEHAVIORAL: Everything people think, say, or do.

C. CHARACTERISTICS: Natural or inherent tendencies, inclinations, traits, or habits of any person, place, or thing.

D. CONSTRUCTION: The job industry by which homes and structures for work, business, storage, and recreation are built.

E. MECHANICS: People whose jobs do not require such highly developed skills.

F. WORKERS: People whose jobs do not require such highly developed skills.

G. ASSOCIATIVE: Brain activity which relates or applies learning to specific situations, conditions, or circumstances.

H. COGNITIVE: Brain activity by which learning or knowledge is stored up and remembered at a later date.

I. PSYCHOMOTOR: Integrative, simultaneous, or cooperative brain and body activity in the performance or doing of a skill or task.

III. COMPARATIVE ASSOCIATIVE CHARACTERISTICS.

MECHANIC	WORKER
A. SAFETY AND HEALTH.	A. SAFETY AND HEALTH.

(NOTE: This is only a partial sample. Complete information for this outline can be found in section ONE:IV:A-C.)

2. Reading and Charting as Verbal Skills Instruction. Charting is a method by which material written by others is outlined in written form by the reader for better comprehension and retention. Most textbook material, particularly technical information, is tightly structured around unit headings, sub-headings, and paragraph topic sentences. Once the reader has homed in on the writer's outline of material information, comprehension and retention come more readily. An old adage in vocational education is: "Tell them what you're going to tell them; tell them; then, tell them what you told them." That is exactly what a good textbook does. The book title states in a very general way what the entire book is about. Sub-headings within the chapter unit tell in more specific terms what smaller segments of the material include. And finally, topic sentences outline briefly what each paragraph is about. These intermediate transitions relate to each item of information presented in very much the the same way the introduction relates to the entire book. At all times, good textbook material is presented in such a way that the reader may be aware of exactly what the writer is presenting and why the information is important.

How comprehensively the reader may be required to chart the material depends largely on how much material is being covered, how complex the material is, and how well the terminology and subject matter relate to the reader's reading level and expertise in the subject area. Generally, for textbook charting at grade level, title, headings, and sub-headings would be a reasonable assignment for book-length charting. For chapter or unit assignments, headings, sub-headings, and topic sentences would likely suffice for helping the reader begin to better understand the material. In any case, the charting should be an exact copy of the writer's work, insofar as wording, spelling, punctuation, and capitalization are concerned. No other writing exercise can serve as well to help readers, even good readers, glean the optimum information from written material, as well as help them to structure their own writing. Charting is hard work, and to be effective, should be a regular and ongoing assignment for all or most written material furnished the students.

Once students have mastered the charting technique, they will begin to feel more comfortable with reading assignments they are given as part of course work. Furthermore, these same students could possibly begin to perform better in their other classes, as well. School could become more meaningful to them overall. And as a result, they might end up with a much better general education. In any event, charting has been shown to be an extremely efficient method for readers, both good and not so good, to improve both comprehension and retention of written material. For handicapped students, the method should prove doubly effective. It puts them on task along with the regulars who have been given the same reading assignment. And when the assignment is complete, all the students, both handicapped and regular, have something tangible to show for their efforts. They have tackled the writer head-on, and have come away with some of his best stuff. If they understand it and remember it, then, it is forever their own. This is the kind of successful reading both regulars and handicapped need.

One final word to the teacher about charting: Play fair with the students. If they are taught until they learn that charting gets at the gist of the important written matter, then quizzes, tests, and exams should cover that same body of material, not some irrelevant, nice-to-know footnote at the bottom of some page in the bibliography. About the only benefit of this kind of addendum in any textbook is that it keeps the writer from being sued for plagarism.

Following is a partial sample of charting from a textbook familiar to most building trades teachers.

SAMPLE OF CHARTING METHOD

MODERN CARPENTRY

Wagner, Willis H., Goodheart-Wilcox Co., Inc., 1976, 480 Pages

INTRODUCTION--Page 3 Thesis

Purpose

THESIS

MODERN CARPENTRY is an easy-to-understand encyclopedia containing up-to-date information on building materials and construction methods. MODERN CARPENTRY provides detailed coverage of all aspects of light frame construction . . . and also basic technical information that covers physical properties and other important characteristics . . . of many new materials. The proper use and application of these . . .depend on a craftsman who has considerable knowledge about . . . function in the completed structure.

PURPOSE

. . . to provide basic instructions for students . . . as a valuable reference . . . (that) will enable . . . persons to handle many construction jobs that they would otherwise be reluctant to undertake.

Unit 1--Pages 9-23 HAND TOOLS

Unit Thesis

Sub-Headings

Topic Sentences

UNIT THESIS

Hand tools are essential to every aspect of carpentry work. A great variety of tools are required because the work covers a broad range of activities.

SUB-HEADING Measuring and Lay Out Tools--Page 9

TOPIC SENTENCE(s)

Tools in this group are illustrated in Fig. 1-1. These tools must be handled with considerable care and kept clean if a high level of accuracy is to be maintained in their use.

SUB-HEADING Saws--Pages 10-11

TOPIC SENTENCE(s)

The principle types of saws used by the carpenter are illustrated in Fig. 1-4. These are available in several different lengths as well as tooth sizes (points per inch).

3. Outlining and Writing as Verbal Skills Instruction. Outlining is a method by which proposed written material is initially structured so that the finished written matter may lend itself to better comprehension and retention by others who read it. By the time students, either handicapped or regular, reach a building trades class, their writing skills are about as good as they are going to be. Therefore, the building trades teacher, just as with lending help with reading, will better serve students in the program by helping them more efficiently use the writing skills they have already. Most all students, both regular and handicapped like to write, as evidenced by the graffiti on every reachable surface on a school campus. But students who learn to outline learn better how to express themselves in written form. Very likely, the first step toward learning how to outline writing is learning how to chart reading. In no case, should the teaching of outlining be reduced to teaching of students how to produce something which merely looks like an outline. Once students have grasped the fact that an outline is the skeleton of the actual finished writing, then the method begins to make sense to them. On the other hand, if it is only a conglomeration of properly placed Roman and Arabic numerals, upper and lower case letters, it serves no purpose for either writer or reader. Instead, the method, improperly taught and applied, serves rather to confuse and impede the writer. In reality, the charting of material written by others is likely the very best tool for teaching outlining and writing. If fact, there is no real distinction between reading and writing instruction, and the teacher will do well to incorporate closely all reading and writing assignments.

a. Reading and Writing Assignments. Once students have grasped the principle of subjects, headings, sub-headings, and topic sentences, larger body of material can be more easily developed and written. Probably, however, in any on-going building trades program, students will be given more reading than writing assignments. Nevertheless, if charting is part of the reading assignment, writing in its purest, most correct form is included. Obviously, if building trades students are to spend adequate time learning and practicing shop skills, it is impossible for them to spend a great deal of time at any kind of desk work. Nonetheless, some desk work is part of the overall program. The teacher can help students structure and discipline both their reading and writing by insisting that only good, readable, and correct copy be turned in as finished work. Dictionaries and grammar textbooks should be available for reference. Essay questions should be included in any comprehensive quizzes, test, and exams. Handicapped students, especially, have been allowed to move up through the grades with desk work which requires almost no extensive reading or writing. Effort on the part of the teacher to help all students to make the most of their reading and writing skills is time well spent. Optimum future success in construction occupations will ultimately top out at some point for each student, based to a large extent on how well that student can read and write. Also, since reading and writing deficiencies may be giving some building trades students problems in their other courses, once they learn better how to utilize the skills they have, they may begin to improve their grades in all their school work. Even if this proves true only in a few cases, the result is worth the effort. Reading and writing assignments, then, are not time away from skills training; they are, rather, essential parts of skills training. And if this be true, then reading and writing assignments are part of the teaching task for building trades teachers.

Sequentially, reading and charting probably should come first, followed closely and then accompanied by outlining and writing. Again, whatever outlining method is used, the result of students' work should not be some fake counterfeit which only resembles an outline. Probably, for less than expert readers and writers, an outlining method which requires no numerals or letters may be best. One such outlining method, developed by the writer and presented here, might be called the expanding outline. A handicapped, poor reader could be teamed with a regular student with more ability for this assignment.

b. The Expanding Outline. How many students have labored all night over an outline assignment, turned it in for approval, got it back from the teacher, and never used it again? The reason for this reality is that what was developed was not an outline to begin with. It only looked like what the textbook showed as an outline model. For teaching students how to develop a real outline, the building trades teacher very likely may have a better model than any other teacher: The sequence of work on a construction project. Nothing lends itself to outlining better than construction activities. At the same time, many building trades teachers have not learned the skills of writing these down. However, once any building trades teacher works through the development of good instructional program material, the same methods used to develop the instruction will work very well for most any other kind of writing task. Only a very few items of technical expertise need to be mastered before the building trade teachers affinity for sequence and detail can be transferred to development of good writing.

First, any writer needs to outline a good introduction for the written material. To do that, the writer needs to know what a good introduction contain. In reality, the introduction does exactly what was stated here earlier: It "tells them what you're going to tell them." In other words, in very brief form, and with very little detail, the introduction actually outlines the entire writing. Although the introduction may contain other items, it must contain three essential items: the purpose of the writing, the thesis or general theory behind the writing, and the general organization of all that is to follow. That's it—purpose, thesis, and organization, although not necessarily in that order. For example, the introduction of this writing makes this statement: "The contention here is that, with reasonable effort, current building trades instruction can be modified to meet the needs of certain mainstreamed handicapped students." That is the thesis for this curriculum, the theory or philosophy upon which it is based. The next sentence in the introduction states in part: "The intention here is to develop the basis for such modification . . ." That is the purpose of the writing—to develop a curriculum outline building trades teachers can use to develop specific lesson plans. Then, in the concluding paragraph, there is a fairly brief outline of the entire written work to follow. That is the organization. This particular introduction contains one other element—the first two paragraphs—which might be called background information. In the expanding outline method, the introduction outline would look like this to begin with:

INTRODUCTION
Background
Thesis
Purpose
Organization

Obviously, such a brief outline would mean nothing to anyone except the writer. But then, the writer is the only person the outline has to serve. And if nothing else, for the writer anyway, even that sketchy beginning marks the starting and stopping places of all that will develop henceforth. Follow closely, as the descriptors just right of center move to the far left:

BACKGROUND	Building Trades Programs Described Defined
	Mainstreamed Handicapped Identified Recruitment Potential
THESIS	Building Trades Curriculum Amenable to Modification for Mainstreamed Handicapped
PURPOSE	To Develop Basis for Curriculum Modification through Parallel Curriculum Outline
ORGANIZATION	Handicapped Exploration Handicapped Effect on Regular Students Rationale for Including Handicapped Occupational Working Conditions Comparative Characteristics of Mechanics and Workers
	Application Broader Occupational Analysis Prerequisites and Objectives for Handicapped
	Development—Specific Areas.

Quite clearly, the introduction is beginning to take form and substance, as descriptors move from right to left, and additional details are added to the right. At some point very soon, the introduction has virtually written itself. Also, the last descriptor "the organization" begins to develop the outline for the writing itself. By continuing to expand the organization from right to left, the entire outline can be developed as comprehensively as the writer desires.

Second, then, after in the introduction, "you will tell them what you're going to tell them," in the remainder of the written content, "you will tell them." Watch closely:

EXPLORATION	Preliminary Occupational
APPLICATION	Pre-Employment Laboratory
DEVELOPMENT	Preparatory Instructional

Actually, what is happening here is the natural division of the material into three logical categories: the exploration of the construction industry itself, in search of occupations which might lend themselves to being taught to handicapped students; the implementation of this exploration in the building trades program itself; the development of instructional material for teaching the handicapped students. In reality, then, the first two sections of the writing relate closely to the first two paragraphs in the introduction. In other words, both are enlargements upon introductory background material. Only in the third and final section is the instruction for students to be found. However, some of the material from the first two sections might lend itself very readily for informational lesson development to round out the students' familiarization with the industry and its relationship to the building trades program.

Third, and finally, although the official introduction appears first in the writing, introductory material is necessary throughout, in order to keep the reader on track. In fact, at the beginning of each of the three sections, comprehensive introductions are presented, not unlike the main introduction itself. Also, general background material is added, along with more specific informational material. In section three, for example, the outline would expand like this:

PREPARATORY INSTRUCTIONAL DEVELOPMENT	General Observations of Program Modification
	Specific Areas of Parallel Instruction
GENERAL OBSERVATIONS OF PROGRAM MODIFICATION	Handicapped Recruitment Should Not Adversely Affect Program
	Non-Modified Program Should Not Recruit Handicapped
	All Students Should Benefit from Program
	Program Should Benefit from All Students
	Both Regulars and Handicapped Should Benefit More by Mutual Enrollment than by Enrollment in Separate Programs
	Any Other Modification Would Be More Like CVAE or VEH for Handicapped
SPECIFIC AREAS OF VOCATIONAL DEVELOPMENT	Social Skills
	Verbal Skills
	Computational Skills
	Specialized Skills

In conclusion here, it should be pointed out that introductory material within the writing serves also to expand upon the organizational aspect of writing. For example, earlier in the outline, and in the writing itself, the areas of instruction are only identified by descriptor, not itemized as they are just above. There are two reasons for that: The earlier introduction is more brief and concise, and the later introduction is nearer to the material it introduces. Again, this serves to keep the writer on track. At this point, this information on the expanding outline has "told them what it's going to tell them." Now it is doing what finished writing is supposed to do. It is "tellin' them what it told them." That is to say, complete writing ends with some kind of summary. It is sufficient here to say that student notes on chalk board and overhead projector lecture outlines, reading and charting, and outlining and writing are all good devices for helping students make the most of the reading and writing skills they have.

4. Club and Classroom as Verbal Skills Instruction. Speaking and listening also are vital communication skills which, for most students in general, and handicapped in particular, have lots of room for improvement. In this area, especially in the area of improved speaking, the building trades program may have more to offer than academic classroom: That is to say, the value of the vocational club should not be underestimated as a tool for teaching speaking and listening skills. Aside from the club, any teacher has the right to insist that students listen and pay attention in class. Together, the ritualistic atmosphere of the club and the disciplined environment of the classroom form a strong combination for improving students' speaking and listening skills.

a. The Vocational Club as Verbal Skills Instruction. For many students, vocational clubs provide something they receive no place else: the opportunity for speaking in a formal, ceremonial, ritualistic atmosphere. For better or worse, many families have abandoned religious institutions and similar opportunities provided there. Also, many building trades students, both regular and handicapped, do not come from the social strata where scouting and the like are important. Few participate in any varsity sports or other co-curricular activities. Thus, the club, provides an aspect of life which most building trades students have no place else. Any building trades teacher who has attended regional or state VICA meets has seen what can be done with students just like those that teachers deal with every day. And for all the gruff, bluff, pretended indifference, no building trades student ever brought home a ribbon or trophy from the contests without the same pride as the captain of a state championship football team. The vocational club is one of the best, if not the best, tool for teaching verbal skills at the building trades teacher's command. Regular drill in the opening and closing ceremonies opens up the world of structured, formal communication as perhaps nothing else in the public schools. It might be truly astounding to know how may community leaders have risen to their slot in life on the strength of parliamentary procedure they learned in some FFA program, where they learned little else that presently benefits them. VICA programs can perform the same service for students in building trades classes.

b. The Classroom as Verbal Skills Instruction. For some students, the only place where they are required to sit down and be quiet and listen is in the classroom. This is not even required in every classroom. But teachers perform no real service to students by allowing them to abuse their classroom privileges. In fact, such permissiveness inhibits learning for students. Only by paying attention can students get full benefit of what should be provided for them in the classroom. And students do this only where it is required. Any group of persons, students, adults, or otherwise, demonstrate the ultimate form of rudeness when they come into a formal, planned setting, where any other individual is scheduled to address the group, and do not listen and give their attention to the speaker. And no one, student or adult, should be allowed to do that. Buzz words such as courtesy and respect have no meaning without some kind of consensus definitions. For example, a good definition of courtesy might be something like this: acceptable levels and limits of familiarity among peers, superiors, and or/subordinates, in a given social setting. Over familiarity, where it is not appropriate, shows crudeness and rudeness—discourtesy which should not be tolerated. For respect, perhaps this is a good definition: allowance of rightful and responsible participation in a given social situation. Rudeness, crudeness, discourtesy, and disrespect can be communicated from the back of the room to the front, without anyone saying a word. Students have a right to be in the classroom—if they exercise that right responsibly. Some people, even some people who write the laws, try to make a big deal out of mandatory attendance as a justification for allowing disruption in a classroom. Let folks who are required to be present for jury duty create a disturbance in court. Mandatory attendance won't excuse them from being thrown into jail for contempt of court. Or let a draftee use his mandatory status as an excuse for disrespect or discourtesy to an officer. He can scream about his rights all the way to the stockade. Students need to learn how to listen, how to pay attention, and how to give and receive courtesy and respect. Most building trades teachers have supervised scores of rough, tough, hard working, hard living grown men. And they knew how to get and keep their respect. The same social skills that worked for building trades teachers out on the job will work in the classroom. And they are just as legitimate. Sometimes, before students will listen, teachers have to get their attention. Sometimes that is not very easy to do. But it can be done; it should be done. If teaching and learning are to occur, it must be done.

As already stated, many students can't read or write because, above all else, they don't listen. They don't pay attention. They don't participate rightfully and responsibly. They don't observe acceptable levels and limits of familiarity. When that happens, they don't deserve to be in the classroom. They have no right to be there. And if necessary, the teacher has the responsibility to throw them out. That gets their attention—every time. And when they come back to class, the light of newly acquired knowledge gleams from their eyes. They have learned that in that school, there is at least one teacher who is serious about his job. And they have learned that, if they want to be in that classroom, they had better be serious about their job. Those kinds of lessons are communication skills, too. And they're important lessons to learn—before they meet up with someone in the street who could care less about their mandatory school attendance status. Those guys can teach some lessons in communication skill, too. But sometimes, the learners don't live long enough to benefit from the experience.

C. COMPUTATIONAL SKILLS.

Just as with reading and writing skills, some students, both handicapped and regular, are going to have to get by in life with poor computational skills. Nevertheless, a fully developed building trades program should include instruction in construction related math. However, expectations for most building trades regulars and few, if any, handicapped should not be set very high. Contrary to popular opinion, computational skills have little to do with the work performed by most construction mechanics, even less with that performed by construction workers. In fact, the degree of computational skills is a keypoint of departure between the construction mechanic and the construction supervisor. In theory, the construction mechanic uses a great deal of math; in practice, it is simply not so. To be sure, a great deal of math is used day by day on a construction site, but these computations are done by a very few people, usually people in supervisory capacities. Nonetheless, these dismal facts do not indicate that there is no need to teach construction related math in a building trades program. Along with future construction mechanics and workers in the class, there are those students also who are future crafts foremen and project superintendents. These few, whether they be regular or handicapped students, will need the computational instruction they receive in the course. Also, if the instruction provides continually information and evaluation from the very simple to the more complex, all the students will improve their computational skills. This is true because, in the vocational program, students will have opportunities to apply math principles to actual hands-on performance. Students who may be weak in regular math classes will benefit greatly by seeing how math problems relate to real situations. Of real importance, however, individual degrees of computational skills should not determine whether students pass or fail the course. Instead, math proficiency might be used in identifying students who would make the better grades in the course. Such an evaluation is right on target when compared to actual job situations: It is people with good computational skills who wind up with the more responsible, therefore more secure, jobs in the construction industry. Two areas of related math should be taught in the building trades course: (1) general or survival math, and (2) construction related math.

1. Survival Math. Day to day living produces needs for some computational skills. Everybody needs to know how to balance a checkbook, how to compute hours actually worked on a job, and how to determine whether or not the amount on a paycheck is correct. Many students, especially handicapped students, believe a quarter hour to be twenty-five minutes. Not all of them can ever be convinced otherwise. The effort should be made anyway. Few, if any, handicapped students, can figure out how many hours have elapsed from given starting and ending clock times. The same is true of many regular students. Some students, both handicapped and regular, cannot determine gross pay from given hours and rate. Computing overtime pay will stymie even more. Computational problems involving time and money should provide a good deal of desk work for both handicapped and regular building trades students, particularly in quizzes, tests, and exams. After all, job skills are learned in order to obtain jobs, not an end in itself, but a means to the end which is survival in the larger society. Basic computational skills involving time and money, though not entirely essential, are vital to that survival.

2. Construction Math. Construction related math involves computations of quantities of time, materials, and money. Principles include linear measurements, surface areas, and solid volumes, as well as board feet of lumber, clock hours, and wages and material costs. Most, though not all, areas are rectangles, solids and cubes. Circular, spherical, or odd-shaped areas and volumes are beyond the computational ability of many people in construction, even in supervisory capacities. However, there are those elite few, usually with higher-paying, more secure jobs, who can perform these computations for those who cannot. Therefore, it is highly likely that some students within the building trades class can either perform or learn to perform these more complex computations. Thus, the entire spectrum of construction related math should not be too high. Neither should computational skills determine passing or failing in the course. At the same time, quizzes, tests, and exams should include construction math problems as identifiers of those students who will likely excel in the construction industry. At the upper, professional, levels, of course, engineers and architects perform computational skills elevated to their highest degree. However, on the construction site itself, it is the rare individual who has math competencies for on-the-spot field applications. Those

few who have these skills are in high demand. Therefore, construction related math should be an important element in building trades instruction. Encourage the use of hand held calculators especially for handicapped students.

3. Math Assignments. In a building trades program, computational skills will range among students, both regualar and handicapped, from virtually non-existant to excellent competency, thus requiring a rather comprehensive math curriculum, if all students are to be served. A significant number will not know the multiplication tables; some will not be able to work with percentages or decimals; even more will be unable to work with common fractions. On the other hand, quite a few will be highly proficient with math problems at their grade level. Any math assignments will have to be designed to provide opportunities for students within this broad range of competencies to have some success. Probably, a very comprehensive pre-test would be the best place to begin, in order to discover where each individual student is in math competencies. From that point, making sure that all students who can do so learn the multiplication tables and become proficient with the carpenter's rule would be a good start. After that, regular instruction and periodic evaluation should give students sufficient drill to develop whatever math competencies they have. The most important thing is that any math assignments be of a sufficient range of competencies to provide something for everyone. Also, math competencies should not be the basis for either passing or failing the course. In fact, computational skills probably should count for no more than ten percent of the total grade. At the same time, no more than the same ten percent of course time should be used for math assignments. Those students who have good math skills can only be helped to improve their competencies within very reasonable expectations. In other words, students who are strong in math may not need the help; those who are weak may not benefit very much reasonable expectations. In other words, students who are strong in math may not need the help; those who are weak may not benefit very much from the help. The effort should be made; the teacher must be content to live with the results, no matter how meager.

D. SPECIALIZED OR SHOP SKILLS INSTRUCTION. Aside from comprising the elements which are ideal for teaching, through precept and demonstration, the practical applications of general information, social skills, communication skills, and computational skills, the building trades components of classroom, shop, and field project provide the setting for teaching the principles and practices of building trades occupational skills. All aspects interact integratively to create a work-simulation environment which develops a far greater potential for teaching and learning than any single-subject classroom environment can provide. Properly structured, each occupational, scholastic, and social element of the instruction fits neatly into each and every classroom, shop or project assignment. And the total impact goes far beyond the mere learning of shop skills. However, the very nature of building trades occupational analysis is a lesson in the structure, order, and discipline of life itself. Of all the various vocational industrial education programs, building trades is more holistic and less piecemeal. Teacher and students begin with a bare plot of ground and move forward to complete a project which is finished in every detail. Every job assignment is geared toward project completion. In the process, students apply related scholastic, occupational, and social skills at every turn. They must be able to read and write certain items, compute certain related math problems, and work together as a crew, all in order to carry out their job assignments. And if they are to derive optimum benefit from the program, they need a certain amount of general information about the larger world around them, in order to fully understand the value of the world of work. Some aspects of the general, technical, and scholastic information of the course are better taught in the classroom. Some practice and drill are easier in the shop. But it is on the field project that all these are brought together in their most practical and logical applications. Here drill, practice, and simulation realities, as each task of each job, in every minor block of each major block, fit together to complete the project. Analytically, then, shop skills instruction in a building trades program revolves around the myriad job tasks and assignments which ultimately complete the various components, or major blocks, are, as follows: (1) foundation; (2) walls and partitions; (3) roof; (4) finish.

The project major blocks are outlined in student objectives for specialized skills. subsequent jobs within minor blocks, together with tasks essential to completion of these jobs, comprise a body of skills development activities suitable for instructional purposes.

PROJECT: Construct a Single-Family Dwelling

REGULAR STUDENTS	HANDICAPPED STUDENTS
PROJECT OBJECTIVE: The student will be able to perform a variety of skill tasks necessary for the construction of a single-family dwelling, by following directions, as instructed.	PROJECT OBJECTIVE: The student will be able to assist in the performance of skill tasks necessary for the construction of a single-family dwelling by performing a variety of semi-skilled and unskilled tasks, followingdirections, as instructed.

MAJOR BLOCK I -------------------Construct a Concrete Foundation

MAJOR BLOCK II--------Construct the Project Walls and Partitions

MAJOR BLOCK III------------------------Construct the Project Roof

MAJOR BLOCK IV------------------------Install the Project Finish

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK I: Construct a Concrete Foundation

REGULAR STUDENTS	HANDICAPPED STUDENTS
MAJOR BLOCK I OBJECTIVE: The student will be able to perform a variety of skill tasks necessary for the construction of a concrete foundation , by following directions, as indicated.	MAJOR BLOCK I OBJECTIVE: The student will be able to assist in the performance of skill tasks necessary for the construction of a concrete foundation, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

MINOR BLOCK A-------------------------Prepare Foundation Earthwork

MINOR BLOCK B----------------------------Erect Foundation Formwork

MINOR BLOCK C--------------------------Prepare Foundation Subgrade

MINOR BLOCK D--------------------------Install Foundation Concrete

MINOR BLOCK E----------------------------Strip Foundation Formwork

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK I: Construct a Concrete Foundation

MINOR BLOCK A: Prepare Foundation Earthwork --- A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
Goal: The student will be able able to perform a variety of skill tasks necessary for the preparation of foundation earthwork, by following directions, as instructed.	Goal: The student will be able to assist in the performance of skill tasks necessary for the preparation of foundation earthwork, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

76

I. PREPARATION: Student Introduction. Classroom and shop familiarization with job assignment tools, materials, tasks, techniques, and procedures. Detailed instructions concerning general work safety and specific safety rules for particular tools, materials, and tasks.

II. DEMONSTRATION: Student Utilization. Job site performance of selected tasks in each job assignment under close supervision, supplemented by teacher demonstrations, as necessary.

A. JOB 1: Construct Foundation Batter Boards

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK A: Locate lot corners.	1. TASK A: Assist in location of lot corners. TASK DETAIL: As Instructed. a. With sharpshooter shovel and other digging tools, dig for and locate existing lot corner markers. b. With axe, machette, and other cutting tools, clear underbrush, as necessary, along lot boundaries. c. Hold 0 end of measuring tape on corner marker. d. Hold transit lining rod on corner marker.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As Instructed. e. With sledge hammer, drive surveyor's hub for missing corner marker, as necessary.

SAFETY: A lining rod looks like a spear, but it's not for that purpose!

SAFETY: Stress footing, balance, and distance to avoid striking someone or pulling a muscle.

2. TASK B: Establish foundation corners.	2. TASK B: Assist in establishment of foundation corners. TASK DETAIL: As Instructed. a. As necessary, clear underbrush, hold 0 end of tape, and hold transit lining rod to transfer foundation offset lines from lot boundaries. b. Drive survey hubs for foundation corners.
3. TASK C: Establish batter board offsets.	3. TASK C: Assist in establishment of batter board offsets. TASK DETAIL: As Instructed. a. Hold 0 end of tape on foundation corners. b. With sledge hammer, drive 2x4 uprights for batter boards.
4. TASK D: Establish batter board grade elevations.	4. TASK D: Assist in establishment of batter board grade elevations. TASK DETAIL:A As Instructed. a. Hold level rod on bench mark. b. Hold level rod on batter board uprights.

REGULAR STUDENTS	HANDICAPPED STUDENTS
5. TASK E: Fasten batter board ledgers.	5. TASK E: Assist in fastening batter board ledgers. TASK DETAIL: As Instructed. --Hold ledgers on elevation marks on uprights for fastening.
6. TASK F: Brace batter boards.	6. TASK F: Assist in bracing batter boards. TASK DETAIL: As Instructed.
7. TASK G: Establish foundation lines on batter board ledgers.	7. TASK G: Assist in establishment of foundation lines on batter board ledgers. TASK DETAIL: As Instructed. —Hold transit lining rod on foundation corners.

B. JOB 2: Strip Foundation Location

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. Task A: Clear underbrush from foundation location.	1. TASK A: Assist in clearing underbrush from foundation location. TASK DETAIL: As Instructed. a. Cut underbrush within location. b. Cut underbrush to size suitable to be moved by hand. c. Remove and pile brush beyond construction area.
2. TASK B: Remove grass, stumps, and roots from foundation location.	2. TASK B: Assist in removal of grass, stumps, and roots, from foundation location. TASK DETAIL: As Instructed. a. With shovels, picks, hoes, rakes, and other digging tools, as necessary, dig up grass, stumps, and roots.

REGULAR STUDENTS	HANDICAPPEDSTUDENTS
	b. With potato forks and wheelbarrows, remove grass, stumps and roots from location, and pile beyond construction area. c. With digging tools and wheelbarrows, excavate, remove, and stockpile top-soil beyond construction area for future use.

Safety: Stress hazards of muscle strain from wheelbarrow overloads.

C. JOB 3: Shape and Compact Foundation Earthwork

1. TASK A: Set cut and fill stakes to grade.	1. TASK A: Assist in setting cut and fill stakes to grade. TASK DETAIL: As Instructed. a. Hold 0 end of tape on batter board stringlines. b. Drive surveyor's hubs flush with ground within foundation location. c. Hold level rod on hubs for cut and fill stakes. d. Write cuts and fills on surveyor's guard stakes. e. Drive guard stakes at an angle over cut and fill stakes.
2. TASK B: Shape foundation earthwork to cut and fill stakes.	2. TASK B: Assist in shaping foundation earthwork to cut and fill stakes. TASK DETAIL: As Instructed. a. In cut areas, remove earth-work to depth shown on guard stakes. b. In fill areas, build up earth-work, with material from cut areas, to height

REGULAR STUDENTS	HANDICAPPED STUDENTS
	shown on guard stakes.
	c. As necessary, remove and waste any excess material.
	d. As necessary, spread to grade any borrow brought in.
	e. Hold level rod for check grade shots at areas between cut and fill stakes.
3. TASK C: Compact foundation earthwork to grade.	3. TASK C: Assist in compacting foundation earthwork to grade.
	TASK DETAIL: As Instructed.

Safety: Stress avoiding blows to the feet with hand tamps.

	a. With hand tamps, compact earthwork to remove voids and make firm.
	b. With water hose and spray nozzle, sprinkle lightly with water, as necessary, to expedite compaction.
	c. Hold level rod for spot check grade shots.

III. APPLICATION: Student Implementation. Job site performance of task assignments with increased proficiency and decreasing supervision, as students become better acquainted with tools and materials, techniques and procedures. Improved initiative and aptitude for work. Safe and adept manipulation of tools and materials. Overall improvement in attitude, enthusiasm, and achievement. Signs of personal satisfaction in individual accomplishments.

IV. SUMMARY: Students Reinforcement. Additional classroom and shop reiteration of day to day details of routine safety, maintenance, and security. Correction of any grade, alignment, or compaction flaws or errors which might adversely affect quality of foundation. Final disposal of underbrush, vegetation, and any excess of excavated foundation material. Further clearing of lot, as necessary.

V. VERIFICATION: Student Success. Individual and group goals objectives are achieved when foundation earthwork is ready for the next phase of project construction. Students should be able to assume more and more personal responsibility daily for getting proper tools and materials to and from job site, as well as perform more efficiently with each passing day. Skills developed in this phase of the work should transfer forward for better production during the next phase. There should be evidence of better peer rapport, as well as improved relationships between teacher and students. A real crew or teamwork spirit should be well developed at this point. Anticipation should be high for getting on with the project work.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK I: Construct a Concrete Foundation

MINOR BLOCK B: Erect Foundation Formwork —-A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
Goal: The student will be able to perform a variety of skill tasks necessary for the erection of foundation formwork, by following directions, as instructed.	Goal: The student will be able to assist in the performance of skill tasks necessary for the erection of foundation formwork, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Classroom and shop familiarization with job assignment tools, materials, tasks, techniques, and procedures. Detailed general and specific safety instruction. Delegation of additional student responsibility for transporting appropriate tools and from job site.

II. DEMONSTRATION: Student Utilization. Job site performance of selected tasks in each job assignment under close supervision, supplemented by teacher demonstrations, as necessary.

A. JOB 1: Erect Foundation Edge Forms

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK A: Establish lines and grades for edge forms.	1. TASK A: Assist in establishment of lines and grades for edge forms. TASK DETAIL: As Instructed. a. Pull stringlines between batter boards. b. Drive stakes along stringlines to line and grade.
2. TASK B: Erect Edge form material to grade.	2. TASK B: Assist in erection of edge form material to grade. TASK DETAIL: As instructed. a. Distribute form material along foundation lines. b. Hold 0 end of tape on end of material, as necessary.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As Instructed. c. Hold material for cutting to length, as necessary. d. Hold material for fastening to line stakes at grade.

SAFETY: Stress eye protection and power saw safety.

SAFETY: Stress posture and distance to avoid strain and being struck by claw hammer.

3. TASK C: Brace edge forms to line.	3. TASK C: Assist in bracing edge forms to line. TASK DETAIL: As Instructed. a. Drive brace stakes. b. Push or pull edge forms to line for fastening.

B. JOB 2: Install Foundation Select Fill

1. TASK A: Dump fill into location.	1. TASK A: Assist in dumping fill into location. TASK DETAIL: As Instructed. —Clear tools, materials, etc. from path of dump truck.

SAFETY: Stress pedestrian responsibility around on-site motor vehicles.

2. TASK B: Spread fill to grade over location.	2. TASK B: Assist in spreading fill to grade over location. TASK DETAIL: As Instructed. a. With wheelbarrows and digging tools, distribute fill inside edge forms. b. Pull stringlines across location from nails driven in top of edge forms. c. With digging and spreading tools, spread fill inside forms.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	d. With screed board and stakes marked to grade from stringline, grade fill.

SAFETY: Stress alertness to avoid stumbling, tripping, or falling over forms.

NOTE TO TEACHER: This job is considered part of the formwork, since the grade beams will be formed by select fill and earthwork excavation below the bottom of the edge forms. DETAIL C.: stakes marked to grade from stringline are commonly called "story poles."

3. TASK C: Compact fill.	3. TASK C: Assist in compacting fill. a. With hand tamps, compact fill to remove voids and make firm. b. With water hose and spray nozzle, sprinkle lightly with water, as necessary, to expedite compaction.
4. TASK D: Excavate grade beams.	4. TASK D: Assist in excavation of grade beams. TASK DETAIL: As Instructed. a. Pull stringlines along inside edge of grade beam width from nails driven in top of edge forms. b. With digging tools, excavate grade beams to specified depth. c. Determine specified depth of excavation with stakes marked to grade from stringline. d. Spread excavated material outside and along edge forms to prevent locking forms into place with spilled concrete.

SAFETY: Stress alertness to avoid stumbling, tripping, or falling; distance apart to avoid striking one another.

III. APPLICATION: Student Implementation. Job site performance of task assignments with increased proficiency and decreasing supervision, as students become better acquainted with tools, materials, and techniques. Safety awareness, work adeptiveness and individual initiative become continually more pronounced. Production gets increasingly better. Work quality significantly improving. Competition for achievement and recogniton initiated.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop reminders of personal and individual responsibilities to, on, and from the job site. Corrections of any work flaws or errors. Stockpiling of any salvageable material and removal of any debris which might cause safety hazard or obstruct the path of delivery vehicles. Protection of completed formwork from flooding.

V. VERIFICATION: Student Success. Goals and objectives achieved when formwork is completed and project is ready for next phase of construction. Students should be able to anticipate necessary tools, materials, and tasks, as classroom and shop orientation for next phase begins. Required time for orientation decreasing.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK I: Construct a Concrete Foundation

MINOR BLOCK C: Prepare Foundation Subgrade-----A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
Goal: The student will be able to perform a variety of skill tasks necessary for the preparation of foundation subgrade, by following directions, as instructed.	Goal: The student will be able to assist in the performance of skill tasks necessary for the preparation of foundation subgrade by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Classroom and shop familiarization with job assignments, tools, materials, tasks, and safety, as necessary for adequate orientation of students before beginning job-site work.

II. DEMONSTRATION: Student Utilization. Job site performance of selected tasks in each job assignment under close supervision, supplemented be teacher demonstrations, as necessary.

REGULAR STUDENTS	HANDICAPPED STUDENTS
A. JOB 1: Install Under Slab Sewer Plumbing	
1. TASK A: Lay out and excavate sewer line trench.	1. TASK A: Assist in laying out and excavation of sewer line trench.
	TASK DETAIL: As Instructed. a. Hold 0 end of tape to set line stakes. b. Hold level rod to establish line reference grades. c. Drive line stakes to reference grades. d. Pull stringline on grade along line stakes. e. Excavate trench to specified depth.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	f. Check for depth with stakes marked to grade from string-line.

NOTE TO TEACHER: If governing codes require a licensed plumber, both regular and special needs students may be able to do no more than assist productively or only observe, as codes and plumbing sub-contractor allow.

2. TASK B: Install sewer plumbing.	2. TASK B: Assist in installation of sewer plumbing. TASK DETAIL: As Instructed. a. Distribute sewer pipe and connections alongside trench. b. Hold 0 end of tape on end of sewer pipe, as necessary. c. Hold sewer pipe for cutting to length, as necessary. d. Handle, lift, place and hold sewer pipe for installation, as necessary. e. Cover sewer plumbing with material excavated from trench. f. Backfill and tamp in uniform layers to grade for uniform compaction. g. Remove excess material or add extra, as necessary.

SAFETY: Stress avoidance of injury from appropriate cutting device for type of material.

NOTE TO TEACHER: Details e, f, and g may need to be delayed for inspection by representative of governing code authority. Sewer line outside foundation area provides similar tasks, and may need to be installed in the same operation, depending on governing code.

B. JOB 2: Install Under-Slab Fresh Water Plumbing

1. TASK A: Lay out hot and cold water	1. TASK A: Assist in laying out hot and cold water line locations.

REGULAR STUDENTS

HANDICAPPED STUDENTS

TASK DETAIL: As Instructed

a. Hold 0 end of tape to establish line locations.

b. Drive stakes, as necessary, to mark line locations.

c. Excavate, if necessary, for line installation.

NOTE TO TEACHER: While some types of water lines do not require a trench, others do, providing tasks very similar to sewer line installation. Governing codes may require inspection inside and outside of subgrade location before covering.

2. TASK B: Install hot and cold water lines.

2. TASK B: Assist in installation of hot and cold water lines.

TASK DETAIL: As Instructed.

a. Distribute water line and connections strategically inside subgrade location.

b. Hold 0 end of tape on end of water line, as necessary.

c. Hold water line for cutting to length, as necessary.

d. Lift, handle, and hold water line, as necessary for placing line and making connections.

e. Place and compact backfill to grade on lines, if necessary.

C. JOB 3: Apply Subgrade Pesticide Treatment

---TASK: Apply pesticide treatment, as specified.

---TASK: Assist in application of pesticide treatment.

TASK DETAIL: As Instructed

—Spray subgrade uniformly, as specified, using proper equipment and appropriate compound.

REGULAR STUDENTS HANDICAPPED STUDENTS

SAFETY: Avoid breathing vapors and extended contact with compound; wash hands or other affected areas of body thoroughly and immediately after completion of task.

NOTE TO TEACHER: Governing codes usually require application by licensed exterminator; both regular and special needs students may be able only to observe.

D. JOB 4: Install Subgrade Vapor Barrier

1. TASK A: Unroll vapor barrier.

1. TASK A: Assist in unrolling vapor barrier.

TASK DETAIL: As Instructed.

a. Handle, lift, and carry vapor barrier to subgrade location.

b. Distribute vapor barrier strategically over location.

c. Unroll vapor barrier over location, as situated by others.

SAFETY: Stress alertness to avoid tripping, stumbling, or falling over plumbing projections.

NOTE TO TEACHER: Care must be taken to keep vapor barrier close to ground to prevent wind damage.

2. TASK B: Unfold vapor barrier.

2. TASK B: Assist in unfolding vapor barrier.

TASK DETAIL: As Instructed.

—From one (1) edge, unfold transversely to direction unrolled.

3. TASK C: Tape vapor barrier at joining laps and plumbing penetrations.

3. TASK C: Assist in taping vapor barrier at joining laps and plumbing penetrations.

TASK DETAIL: As Instructed.

—Handle, hold or manipulate vapor barrier, as necessary, to expedite taping operation.

REGULAR STUDENTS | HANDICAPPED STUDENTS

E. Job 5: Install Foundation Reinforcing Bars

1. TASK A: Place reinforcing bars in foundation location, as specified.	1. TASK A: Assist in placing reinforcing bars in foundation location. TASK DETAIL: As Instructed. a. Handle, lift, and carry reinforcing. b. Place longitudinal bars in foundation, as situated by others. c. Hold 0 end of tape on end of longitudinal bars to mark locations of transverse bars. d. Handle, lift, carry, and place transverse bars on marked locations.

SAFETY: Stress proper lifting method to avoid injury from strain.

SAFETY: Stress alertness to avoid tripping over forms or plumbing.

2. TASK B: Tie reinforcing bars, as specified.	2. TASK B: Assist in tying reinforcing bars. TASK DETAIL: As Instructed. —Tie intersecting locations of longitudinal and transverse bars.

E. JOB 5: Install Wall Anchor Templates

1. TASK A: Construct anchor templates.	1. TASK A: Assist in construction of anchor bolt templates. TASK DETAIL: As Instructed: a. Handle, lift, and carry template material. b. Hold 0 end of tape on edge of material to establish cut marks.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	c. Hold end of chalk line on cut marks to snap cut lines. d. Hold tape and chalk line to establish bolt hole locations. e. Hold template material for drilling and cutting.

SAFETY: Stress alertness to avoid injury from drilling and cutting tools.

2. TASK B: Install templates.	2. TASK B: Assist in installation of templates. a. Handle, lift, and carry templates to foundation location. b. Hold 0 end of tape to establish template locations on top of edge forms. c. Hold templates in place for fastening to top of edge forms. d. Hand anchor bolts in template holes.

F. JOB 6: Install Brick Ledge Forms

TASK: Install ledge forms.	TASK: Assist in installation of ledge forms. TASK DETAIL: As Instructed. a. Handle, lift and carry form material. b. Hold 0 end of tape on end of material, as necessary. c. Hold material for cutting to length, as necessary. d. Situate and hold material at top of edge form for fastening.

SAFETY: Stress alertness to avoid injury from cutting tool.

III. APPLICATION: Student Implementation. Job site performance of task assignments with increasing proficiency and decreasing supervision. Production increasingly higher; quality significantly improving.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop reminders of student responsibilities; refreshers on job assignment tools, materials, and tasks. Correction of lay work flaws or errors. Necessary cleanup and stockpiling. Real teamwork developing among students.

V. VERIFICATION: Student Success. Goals and objectives achieved when foundation subgrade is completed and project is ready for next construction phase. Daily routine should include transporting tools to and from job, shop security and cleanup; should preclude all but the barest minimum of classroom and shop safety and technical information presentations, as next phase begins.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK I: Construct a Concrete Foundation

MINOR BLOCK D: Install Foundation Concrete - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for the installation of foundation concrete, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the installation of foundation concrete, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Classroom and shop familiarization with job tools, materials, tasks, and safety, as necessary.

II. DEMONSTRATION: Student Utilization. Job site performance of selected tasks under close supervision; teacher demonstrations, as necessary.

1. TASK A: Establish floor grades in foundation location.	1. TASK A: Assist in foundation location.
	TASK DETAIL: As instructed.
	a. Pull stringline from top of edge forms.
	b. Drive iron pins to stringline grade at locations determined by others.
2. TASK B: Chute Concrete into foundation formwork.	2. TASK B: Assist in chuting concrete into foundation formwork.
SAFETY: Stress pedestrian responsibility around motor vehicles on job site.	TASK DETAIL: As instructed.
SAFETY: Stress caution with power cords around wet areas.	a. Clear materials and debris from path of transit-mix concrete trucks.
	b. Operate power vibrator or puddling sticks, as concrete is chuted into grade beams by others.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	c. Lift and hold reinforcing up from subgrade as concrete is chuted into slab area by others.
3. TASK C: Distribute concrete roughly to grade inside formwork.	3. TASK C: Assist in distribution of concrete roughly to grade inside formwork.
SAFETY: Stress posture to avoid strain.	TASK DETAIL: As instructed.
	a. Drag concrete with concrete rakes and screed board.
	b. Puddle slab against edge forms with power vibrator, or by bumping forms with hammer, to remove voids.

B. JOB 2: Finish Foundation Concrete

1. TASK A: Wet float concrete.	1. TASK A: Assist in wet-floating concrete.
	TASK DETAIL: As instructed.
	a. Puddle slab concrete with jitterbug to lower coarse aggregate and raise grout.
	b. Mop slab with bull float.
2. TASK B: Finish concrete slab.	2. TASK B: Assist in finishing concrete slab.
NOTE TO TEACHER: This task must be delayed until concrete takes the initial set.	TASK DETAIL: As instructed.
	a. Lift and carry trowelling machine or hand trowelling equipment to slab area.
	b. Rough-trowel slab with machine or hand trowels, for final finish by others.

C. JOB 3: Apply Concrete Curing Compound

1. TASK: Apply compound, as specified.	1. TASK: Assist in application of compound.

REGULAR STUDENTS	HANDICAPPED STUDENTS
NOTE TO TEACHER: Most compounds should be sprayed as soon after slab is finished as is feasible to walk on slab without damage.	TASK DETAIL: As instructed. Spray slab surface uniformly, as specified, using proper equipment and appropriate compound.

D. JOB 4: Strip Foundation Formwork

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK A: Strip formwork materials.	1. TASK A: Assist in stripping formwork materials.
SAFETY: Stress removal of nails from material to avoid puncture injury.	TASK DETAIL: As instructed.
NOTE TO TEACHER: Formwork should remain in place at least 3 days to allow curing times for concrete.	a. Knock out braces. b. Remove anchor bolt templates. c. Knock out edge form stakes. d. Pry off edge forms. e. Pry out ledge forms.
2. TASK B: Salvage formwork material.	2. TASK B: Assist in salvaging formwork material.
	TASK DETAIL: As instructed. a. Pull out nails. b. Scrape off concrete c. Stockpile material for future use.

E. JOB 5: Repair Concrete Voids

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK: Repair voids with grout, as necessary.	1. TASK: Assist in repairing voids, as necessary.
	TASK DETAIL: As instructed. a. Mix grout. b. Rough-trowel grout into voids for final finish by others.

F. JOB 6: Apply Slab Surface Hardener

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK: Apply hardener, as specified.	1. TASK: Assist in application of hardener.
SAFETY: Stress observance of cautions on container.	TASK DETAIL: As instructed.
NOTE TO TEACHER: Most hardeners are applied some time after foundation is completed, possibly even after framing phase has begun.	Apply hardener uniformly over slab surface, as specified, using appropriate tools and equipment.

III. APPLICATION: Student Implementation. Job site performance with increasing proficiency and decreasing supervision. Production higher; quality improving.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons, especially during foundation curing time. Ideal opportunity to make field trip to commercial foundation job site in locality. Form materials and foundation tools and equipment removed from job site and returned to shop storage. Crew efforts should be evident.

V. VERIFICATION: Student Success. Objectives and aims achieved when foundation is completed and project is ready for next Major Block of work to begin. Excellent time for written exam covering Major Block just completed. Handicapped student might take oral tests or go to resource room for help reading tests.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK II: Construct the Project Walls and Partitions

REGULAR STUDENTS	HANDICAPPED STUDENTS
MAJOR BLOCK II OBJECTIVE: The student will be able to perform a variety of skill tasks necessary for the construction of the project walls and partitions, by following directions, as instructed.	MAJOR BLOCK II OBJECTIVE: The student will be able to assist in the performance of skill tasks necessary for the construction of the project walls and partitions, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

MINOR BLOCK A - Construct Exterior Wall Framing

MINOR BLOCK B - - - - - - - - - - - - - - - - - - Construct Interior Partition Framing

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK II: Construct the Project Walls and Partitions

MINOR BLOCK A: Construct Exterior Wall Framing -- A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for the construction of exterior wall framing, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the construction of exterior wall framing, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Classroom and shop familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Site performance under close supervision; teacher demonstrations, as necessary.

	HANDICAPPED STUDENTS
1. TASK a: Lay out and cut wall plates.	1. TASK a: Assist in laying out and cutting wall plates. TASK DETAIL: As instructed. a. Handle, lift, and carry plate material to slab. b. Hold 0 end of tape on end of material for marking cuts and layout. c. Hold material for cutting.
2. TASK b: Assemble and construct wall framing.	2. TASK b: Assist in assembly and construction of wall framing.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Handle, lift, and carry wall studs to slab. b. Handle, lift, and carry header material to slab. c. Hold 0 end of tape on end of material for marking blocking and header length cuts. d. Hold material for cutting. e. Assemble studs and built-up members at wall layout locations between plates. f. Hold assembled wall members for fastening by others.

B. JOB 2: Raise Wall Framing

1. TASK a: Lay out and drill sole plate for anchor bolts.	1. TASK a: Assist in laying out and drilling sole plate for anchor bolts. TASK DETAIL: As instructed. a. Hold 0 end of tape for locating and marking anchor bolt holes on sole plates. b. Handle, lift, and hold wall framing for drilling operation.
2. TASK b: Raise and situate framing on anchor bolts. SAFETY: Stress protection of head from falling objects.	2. TASK b: Assist in raising and situation of framing on anchor bolts. TASK DETAIL: As instructed. a. Remove nuts from anchor bolts. b. Handle, raise, and set framing on bolts. c. Hold framing in place for bolting down by others.

REGULAR STUDENTS	HANDICAPPED STUDENTS
3. TASK c: Fasten framing sections together.	3. TASK c: Assist in fastening framing sections together. TASK DETAIL: As instructed. a. Support and hold sections together for fastening by others.
4. TASK d: Install temporary wall braces.	4. TASK d: Assist in installation of temporary wall braces. TASK DETAIL: As instructed. a. Handle, lift, and carry bracing material to construction area. b. Raise end of bracing outside and near top of wall for fastening at locations determined by others. c. Drive stakes in ground near bottom end of bracing. d. Pull stringline along inside of wall framing from corner to corner. e. Push or pull wall framing to line and hold for fastening. f. Hold bracing for fastening to stakes by others.

III. APPLICATION: Student Implementation. Job site performance with increasing proficiency and decreasing supervision; work quantity and quality continuing to improve.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons; field trip to commercial framing site. Crew development continuing.

V. VERIFICATION: Student Success. Objectives and aims achieved when wall framing completed and ready for next construction phase to begin.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK II: Construct the Project Walls and Partitions

MINOR BLOCK B: Construct Interior Partition Framing -- A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for the construction of interior partition framing, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the construction of interior partition framing, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Prior familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Initial close supervision and demonstration, as necessary.

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Lay out partition locations on slab.	1. TASK a: Assist in laying out partition locations on slab. TASK DETAIL: As instructed. a. Hold 0 end of tape to mark partition locations. b. Hold end of chalk line on layout marks to snap partition locations.
2. TASK b: Construct framing.	2. TASK b: Assist in construction of framing. TASK DETAIL: As instructed. a. Perform tasks highly similar to wall framing tasks 1a - 2f.
3. TASK c: Raise and fasten framing.	3. TASK c: Assist in raising and fastening framing. TASK DETAIL: As instructed.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Perform tasks highly similar to wall framing tasks 2b--3, without anchor bolts.
4. TASK d: Secure framing to	4. TASK d: Assist in securing framing to slab. TASK DETAIL: As Instructed. a. Hold framing to line for fastening by others.
5. TASK e. Install double top plate.	5. TASK e. Assist in installation of double top plate. TASK DETAIL: As instructed. a. Lift, handle, and carry plate material to construction site. b. Hold 0 end of tape on end of material to mark plate cuts. c. Hold materials for cutting.
SAFETY: Stress ladder safety.	d. Lift or carry plate materials to top of wall and partition framing. e. Place and hold plate material for fastening by others.

III. APPLICATION: Student Implementation. Job site performance with increasing skill proficiency and personal responsibility for production, quality, and initiative.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons. Excess framing materials removed from site and returned to shop storage. Crew development and effort continuing.

V. VERIFICATION: Student Success. Objectives and aims achieved when partition framing complete and project ready for next Major Block of work to begin. Ideal time for written exam covering Major Block just completed. Handicapped students might need oral test or go to resource room for assistance in reading tests.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK III: Construct the Project Roof

REGULAR STUDENTS	HANDICAPPED
MAJOR BLOCK III OBJECTIVE: The student will be able to perform a variety of skill tasks necessary for the construction of the project roof, by folliwing directions, as instructed.	MAJOR BLOCK III OBJECTIVES: The student will be able to assist in the performance of skill tasks necessary for the construction of the project roof, by performing a variety of semi-skilled and unskilled tasks, folliwing directions, as instructed.

MINOR BLOCK A - Install Ceiling Joists

MINOR BLOCK B - Construct Roof Framing

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK III: Construct the Project Roof

MINOR BLOCK A: Install Ceiling Joists - - - - - A Shop Skills Lesson Outline

REGULAR STUDENTS

AIM: The student will be able to perform a variety of skill tasks necessary for the installation of ceiling joists, by following directions, as indicated.

AIM: The student will be able to assist in the performance of skill tasks necessary for the installation of ceiling joists, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Supervision and demonstration as necessary.

SAFETY: Reinforce ladder safety and head protection.

NOTE TO TEACHER: Revise lesson as needed, if pre-built trusses used.

TASKS: Cut and install joists.

TASK: Assist in cutting and installation of joists.

Task Detail: As Instructed.

a. Handle, lift, and carry joist material to work location.

b. Hold 0 end of tape on end of material for marking cuts.

c. Hold material for cutting.

d. Lift or carry joist material to top of walls.

e. Place and hold joist material for fastening by others.

III. APPLICATION: Student Implementation. Job site performance with increasing proficiency, responsibility, and initiative.

IV. SUMMARY: Student Reinforcement. Field trip to commercial framing site.

V. VERIFICATION: Student success. Objectives and aims achieved when joists installed and project ready for roof framing construction.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK III: Construct the Project Roof

MINOR BLOCK B: Construct Roof Framing - - - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for the construction of roof framing, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the construction of roof framing, by performing a variety of semi-skilled and unskilled tasks, following directions, as necessary.

I. PREPARATION: Student Introduction. Familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Supervision and demonstration, as necessary.

A. JOB 1: Install Roof Framing

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Lay out and cut rafters.	1. TASK a: Assist in laying out and cutting rafters. TASK DETAIL: As Instructed. a. Handle, lift, and carry rafter material to work location. b. Hold 0 end of tape, as necessary, for rafter layout. c. Hold material for cutting. d. Distribute rafters strategically with one end on top of walls.
2. TASK b: Cut and lay out roof ridges.	2. TASK b: Assist in cutting and laying out roof ridges. TASK DETAIL: As Instructed. a. Handle, Lift, and carry ridge material to work location. b. Hold 0 end of tape on end of material, as necessary, for cutting to length.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	c. Hold material for cutting. d. Hold 0 end of tape, as necessary, to lay out rafter locations on ridge boards. e. Distribute ridge boards strategically on ground alongside walls.
3. TASK c: Lay out rafter locations on top of walls, as necessary, where different from joist locations.	3. TASK c: Assist in laying out rafter locations on top of walls, as necessary. TASK DETAIL: As Instructed. —Hold 0 end of tape, as necessary, to mark rafter locations.
4. TASK d: Install roof ridge boards.	4. TASK d: Assist in installation of roof ridge boards. TASK DETAIL: As Instructed. a. Lift, handle, and carry ridge board material to top of walls. b. Hold ridge board material for raising and fastening at locations determined by others.
5. TASK e: Install rafters.	5. TASK e: Assist in installation of rafters. TASK DETAIL: As Instructed. a. Lift, handle, and carry rafters to top of walls. b. Hold rafters for fastening by others.

B. JOB 2: Install Roof Bracing

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Lay out and cut bracing.	1. TASK a: Assist in laying out and cutting bracing. TASK DETAIL: As Instructed. a. Lift, handle and carry bracing material to work area. b. Hold 0 end of tape for marking bracing lengths. c. Hold material for cutting. d. Lift, handle, and carry braces to top of walls.

REGULAR STUDENTS	HANDICAPPED STUDENTS
2. TASK b. Install bracing.	2. TASK b. Assist in bracing installation. TASK DETAIL: As Instructed. a. Hold 0 end of tape for laying out bracing location on rafters and ceiling joists. b. Hold braces on marked locations for fastening by others.

III. APPLICATION: Student Implementation. Job site performance with increasing proficiency, responsibility, initiative, and interest. Improved adeptability at working above ground and among framing members.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons on roof framing. Excess materials removed from project and returned to shop storage. Crew development, effort, and familiarity continuing and improving.

V. VERIFICATION: Student Success. Objectives and aims achieved when roof framing complete, and project ready for next Major Block of work to begin. Ideal time for written exam covering Major Block just completed.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK IV: Install the Project Finish

REGULAR STUDENTS	HANDICAPPED STUDENTS
MAJOR BLOCK IV OBJECTIVE: The student will be able to perform a variety of skill tasks necessary for the installation of the project finish, by folowing directions, as instructed.	MAJOR BLOCK IV OBJECTIVE: The student will be able to assist in the performance of skill tasks necessary for the installation of the project finish, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

MINOR BLOCK A - Dry In Exterior Framing

MINOR BLOCK B - Install Exterior Finish

MINOR BLOCK C - Install Interior Finish

MINOR BLOCK D - - - - - - - - - - - - - - - - - - - Landscape Project Grounds

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK IV: Install the Project Finish

MINOR BLOCK A: Dry In Exterior Framing - - - - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for drying in the exterior framing, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for drying in the exterior framing, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Supervision and demonstration, as necessary.

A. JOB 1: Install Roof Covering

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Install roof decking.	1. TASK a: Assist in installation of roof decking. TASK DETAIL: As Instructed. a. Lift, handle, and carry decking material to work area.
SAFETY: Stress alertness to avoid slips and falls on roof slope.	b. Lift, handle, and carry decking to rooftop. c. Distribute decking strategically over rooftop. d. Hold 0 end of tape for marking decking for necessary cuts. e. Hold end of chalk line on cut marks to snap cut lines on decking.

REGULAR STUDENTS	HANDICAPPED STUDENTS
SAFETY: Stress caution and alertness to avoid slips and falls near roof edge	f. Hold decking for necessary cutting by others. g. Place and hold decking for fastening to rafters by others.
2. TASK b: Install roofing felt.	2. TASK b: Assist in installation of roofing felt. TASK DETAIL: As Instructed. a. Lift, handle, and carry felt to work area. b. Lift, handle, and carry to rooftop. c. Unroll felt at locations determined by others. d. Hold felt for fastening by others.
3. TASK c: Install roof facia.	3. TASK c: Assist in installation of roof facia. TASK DETAIL: As Instructed. a. Lift, handle, and carry facia material to work area. b. Hold 0 end of tape for measuring facia to length, as necessary. c. Hold facia for cutting to length, as necessary. d. Lift, handle, and hold facia in place for fastening by others.
4. TASK d: Install eave angle.	4. TASK d: Assist in installation of eave angle. TASK DETAIL: As Instructed.
SAFETY: Stress caution to avoid cuts from handling sharp-edged materials	a. Lift, handle, and carry eave angle to work area.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As Indicated b. Lift, handle, and carry shingles to rooftop. c. Distribute shingles strategically over rooftop. d. Hold end of chalkline to mark shingle lines. e. Lift, handle, carry, and place shingles at locations to be fastened by others. f. Handle, place, and hold shingles for special applications by others at roof jacks for roof penetrations.
B. JOB 2: Install Wall Sheating	
---TASK: Install sheathing.	---TASK: Assist in installation of sheathing.
NOTE TO TEACHER: Depending on type of fixtures and kitchen and bath locations, some bathroom and kitchen fixtures and equipment may need to be moved into place before walls are sheathed.	TASK DETAIL: As Instructed. a. Lift, handle, and carry wall sheathing to work area. b. Hold 0 end of tape to mark sheathing for cuts to width. c. Hold chalk line to snap cut lines on sheathing. d. Hold sheathing for cutting to width by others. e. Lift, handle, and hold sheathing in place to be fastened by others.
C. JOB 3: Install Windows and Exterior Doors	
1. TASK a: Install windows.	1. TASK a: Assist in installation of windows.
SAFETY: Stress alertness and extreme caution to avoid breakage and cuts sustained from broken glass.	TASK DETAIL: As Instructed. a. Lift, handle, and carry windows to work area. b. Distribute windows around perimeter of building at framed locations. c. Lift, handle, and hold windows in place for fastening by others.

REGULAR STUDENTS	HANDICAPPED STUDENTS
2. TASK b: Install exterior doors.	2. TASK b. Assist in installation of exterior doors.
NOTE TO TEACHER: Lesson may need modifying, depending on whether or not prebuilt door units are used.	TASK DETAIL: As Instructed. a. Lift, handle, and carry door units to work area. b. Lift, handle, and hold units in place for fastening by others.

D. JOB 4: Install Roof Cornice and Brick Pocket

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Install roof cornice.	1. TASK a: Assist in installation of roof cornice. a. Lift, handle, and carry cornice material to work area. b. Distribute cornice material strategically around perimeter of building. c. Hold 0 end of tape to measure cornice to length. d. Hold cornice for cutting to length. e. Lift, handle, and hold cornice in place for fastening by others.
2. TASK b: Install brick pocket.	2. TASK b: Assist in installation of brick pocket. TASK DETAIL: As Instructed. a. Lift, handle, and carry brick pocket material to work area. b. Distribute material at strategic locations around perimeter of building. c. Hold 0 end of tape for measureing material to length. d. Hold material for cutting to length. e. Lift, handle, and hold brick pocket in place for fastening by others.
3. TASK c: Install miscellaneous exterior trim, as specified.	3. TASK c: Assist in installation of miscellaneous exterior trim.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As Instructed. a. Lift, handle, and carry trim material, as necessary. b. Hold 0 end of tape and material for measuring and cutting, as necessary. c. Lift, handle, and hold trim in place, as necessary, for fastening by others.
4. TASK d: Prime or seal all exterior wood surfaces, as specified.	4. TASK d: Assist in priming or sealing exterior wood surfaces. TASK DETAIL: As Instructed. --Apply primer or sealer as specified.

III. APPLICATION: Student Implementation. Job site performance with increasing safety awareness, work proficiency, and personal responsibility, initiative, and interest. Continually improving adeptability at working above ground, among framing members, and atop roof covering. Increasing ability at working with materials overhead and on ladders and scaffolds. Improved anticipation of tool and material needs.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons; field trip to commercial site to observe dry-in operation. Crew development, effort, and pride in performance continuing. Excess materials removed from site and returned to shop storage. Removal and disposal of scraps and debris.

V. VERIFICATION: Student Success. Objectives and aims achieved when project is dried in, and next phase of work ready to begin.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK IV: Install the Project Finish

MINOR BLOCK B: Install Exterior Finish - - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for the installation of exterior finish, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the installation of exterior finish, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Supervision and demonstration, as necessary.

A. JOB 1: Construction Masonry Veneer

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Erect scaffolding.	1. TASK a: Assist in erection of scaffolding.
	TASK DETAIL: As instructed.
SAFETY: Stress footing and tying off of scaffolding to avoid injury from scaffolds falling or collapsing.	a. Lift, handle, and carry scaffold components to work area.
	b. Raise and hold scaffold frames in place for securing by others.
	c. Lift erected scaffolds for blocking and leveling by others.
	d. Lift, handle, and place scaffold boards.

REGULAR STUDENTS	HANDICAPPED STUDENTS
2. TASK b: Construct masonry.	2. TASK b: Assist in construction of masonry.
	TASK DETAIL: As instructed.
	a. Transport bricks to work area with barrows or tongs.
	b. Lift bricks and load scaffold boards.
	c. Mix mortar using shovels and power mixer or tub and hoes, as specified.
	d. Transport mortar to work area with wheelbarrows.
	e. Load mortar boards with mortar, using shovels.
SAFETY: Reinforce head protection to avoid injury from falling objects.	f. Raise scaffold boards to accommodate progressively higher work, as necessary.
	g. Dress mortar joints with appropriate jointing tool, as specified.
	h. Remove mortar waste from ground and work, as necessary.
	i. Take down and remove scaffolding, when masonry work completed.

B. JOB 2: Apply Exterior Color Finish

TASK: Apply exterior color to all wood surfaces, as specified.	TASK: Assist in application of exterior color to all wood surfaces.
	TASK DETAIL: As instructed.
	a. Apply paint or stain, as specified.

C. JOB 3: Install Ventilation Louvers

1. TASK a: Cut ventilation penetrations, as necessary.	1. TASK a: Assist in cutting ventilation penetrations.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Hold 0 end of tape to establish penetration locations. b. Hold ladder for others cutting penetrations.
2. TASK b: Install louvers.	2. TASK b: Assist in installation of louvers. TASK DETAIL: As instructed. a. Handle, lift, and carry louvers to work location. b. Handle, lift, and hold louvers in place for fastening by others.

III. APPLICATION: Student Implementation. Job site performance with increasing personal responsibility for safety, proficiency, initiative, interest, and accuracy in all aspects and details of work. Development of self-confidence and spirit of inter-dependence. Continually increasing ability to work overhead, on ladders and scaffolds, and in and on various parts and levels of the project. Improving familiarity with construction materials and hand and power tools. Greater attention to site cleanup and orderliness.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons; field trip to commercial site to observe brick-laying operations. Crew continuing to develop pride in effort and performance. Time for extra-special cleanup of site, after completion of masonry veneer construction. Scaffolding and excess materials removed and returned to storage. Special attention to cleaning of masonry before excessive curing of mortar waste.

V. VERIFICATION: Student Success. Objectives and aims achieved when all exterior project finish completed, and site is ready for next phase of construction.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK IV: Install the Project Finish

MINOR BLOCK C: Install Interior Finish - - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of tasks necessary for the installation of interior finish, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for the installation of interior finish, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Familiarization, as necessary.

II. DEMONSTRATION: Student Utilization: Supervision and demonstration, as necessary.

A. JOB 1: Install Electrical Rough-In

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Install wall and ceiling boxes. NOTE TO TEACHER: If governing codes require a licensed electrician, both regular and handicapped students may be able to do no more than assist productively or only observe, as codes and electrical subcontractor allow.	1. TASK a: Assist in installation of wall and ceiling boxes. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Hold 0 end of tape to determine box locations, as necessary. c. Distribute boxes at locations to be installed by others.
2. TASK b: Install wall and ceiling wiring.	2. TASK b: Assist in installation of wall and ceiling wiring.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Unroll material, as required. c. Pull material for wall and ceiling wiring, as required.
3. TASK c: Install and wire breaker box and panel.	3. TASK c: Assist in installation and wiring of breaker box and panel. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Hold box for fastening to wall frame-out by others. c. Hold flashlight to illuminate work, as necessary.

B. JOB 2: Install Heating and Cooling Ductwork

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Install ductwork hangers, as specified. NOTE TO TEACHER: Depending on codes, convenience, or expediency, heating and cooling ductwork and equipment may require installation by licensed or otherwise qualified mechanics; both regular and handicapped students may be able only to assist productively or observe.	1. TASK a: Assist in installation of ductwork hangers. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Distribute materials to strategic locations, as determined by others. c. Hold hangers in place for fastening by others.
2. TASK b: Install ductwork, as specified.	2. TASK b: Assist in installation of ductwork. TASK DETAIL: As instructed.

REGULAR STUDENTS	HANDICAPPED STUDENTS
SAFETY: Stress dust masks and protective clothing to avoid inhalation of fibers and contact with skin.	a. Lift, handle, and carry materials to work area. b. Lift, carry, and place materials on top of ceiling joists. c. Situate and hold ductwork materials in place for securing by others.

C. JOB 3: Install In-Wall Plumbing Rough-In

1. TASK: Install plumbing rough-in, as specified.	1. TASK: Assist in installation of plumbing rough-in. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Distribute materials to strategic locations, as determined by others. c. Handle, hold, and manipulate materials, as necessary, for installation by others.

D. JOB 4: Install Wall Insulation

1. TASK: Install insulation, as specified.	1. TASK: Assist in installation of insulation. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Distribute materials strategically to locations determined by others. c. Lift, hold, and manipulate materials, as necessary, for fastening by others.

E. JOB 5: Install Ceiling Insulation and Covering

1. TASK: Install insulation and covering, alternately, and as specified.	1. TASK: Assist in installation of insulation and covering.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Hold 0 end of tape to mark ceiling materials for cuts, as necessary. c. Hold end of chalk line to snap cut lines on ceiling material. d. Hold material for cutting, as necessary. e. Handle, lift, and hold material in place for fastening by others. f. Handle, lift and place insulation between ceiling joists, above ceiling covering material.

F. JOB 6: Install Wall Covering

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK: Install covering material, as specified.	1. TASK: Assist in installation of covering material. TASK DETAIL: As instructed. a. Lift, handle, and carry materials to work area. b. Hold 0 end of tape to mark wall material for cuts, as necessary. c. Hold end of chalk line to snap cut lines on material. d. Hold material for cutting, as necessary e. Handle, lift, and hold material in place for fastening by others.

G. JOB 7: Install Interior Door Units

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK: Install door units.	1. TASK: Assist in installation of door units.
NOTE TO TEACHER: Lesson may need modifying, depending on whether or not pre-built door units are used.	TASK DETAIL: As instructed. a. Lift, handle, and carry door units to work area. b. Distribute units at locations determined by others. c. Lift, handle, and hold units in place for fastening by others.

H. JOB 8: Install Cabinet Work

1. TASK: Install cabinet units, as specified.	1. TASK: Assist in installation of cabinet units.
	TASK DETAIL: As instructed. a. Lift, handle, and carry units to locations determined by others. b. Lift, handle, manipulate, and hold units in place for fastening by others.

I. JOB 9: Install Interior Molding

1. TASK: Install door and window trim, base and ceiling mold, as specified.	1. TASK: Assist in installation of door and window trim, base and ceiling mold.
	TASK DETAIL: As instructed. a. Lift, handle, carry, and distribute molding materials to locations determined by others. b. Hold 0 end of tape to mark materials for cutting to length, as necessary. c. Hold material for cutting to length, as necessary. d. Lift and hold material in place for fastening by others.

J. JOB 10: Apply Interior Color Finish

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Prepare areas for specified color finish.	1. TASK a: Assist in preparation of areas for color finish. TASK DETAIL: As instructed. a. Clean color finish areas, as necessary, in manner determined by others. b. Sandpaper areas, as necessary.
2. TASK b: Protect adjacent areas, as necessary.	2. TASK b: Assist in protection of adjacent areas. TASK DETAIL: As instructed. a. Apply masking tape, as necessary, in areas determined by others. b. Hang drop cloths, as necessary in areas determined by others.
3. TASK c: Apply surface textures, as specified. SAFETY: Reinforce face masks and protective clothing instruction.	3. TASK c: Assist in application of surface textures. TASK DETAIL: As instructed. a. Mix texture materials, as necessary, in manner determined by others. b. Carry or transport mixture to locations determined by others. c. Clean up waste and maintain protection during texturing operation by others, as necessary.
4. TASK d: Apply primers, sealers, and stains, as specified.	4. TASK d: Assist in application of primers, sealers, and stains. TASK DETAIL: As instructed. a. Carry or transport materials to locations determined by others.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	b. Clean up waste and maintain protection during materials applications, as necessary.
5. TASK e: Apply paints, varnishes, and wallpaper, as specified.	5. TASK e: Assist in application of paints, varnishes, and wallpaper.
	TASK DETAIL: As instructed.
	a. Carry or transport materials to locations determined by others.
	b. Hold 0 end of tape to mark lengths of wallpaper.
	c. Apply paste to wallpaper.
	d. Clean up waste and maintain protection during operation, as necessary.

K. JOB 11: Install Finish Plumbing

1. TASK: Install kitchen and bath plumbing fixtures.	1. TASK: Assist in installation of kitchen and bath plumbing fixtures.
NOTE TO TEACHER: If plumbing is a sub-contract item, both regular and handicapped students may be able only to assist productively or observe.	TASK DETAIL: As instructed.
	a. Lift, handle, and carry fixtures to appropriate locations.
	b. Manipulate and hold fixtures in place for installation by others.

L. JOB 12: Install Heating and Cooling Units

1. TASK a: Construct cooling unit pad, as necessary.	1. TASK a: Assist in construction of cooling unit pad.
NOTE TO TEACHER: If heating and cooling installation is a sub-contract item, both regular and handicapped students may be able only to assist productively or observe.	TASK DETAIL: As instructed.
	a. Hold level rod to determine grade control for concrete pad.
	b. Prepare pad subgrade with digging tools and hand tamp.
	c. Lift, handle, and carry form materials to pad area.

REGULAR STUDENTS

NOTE TO TEACHER: This task is a good place to allow handicapped to do some of the more skilled details, as well as to prepare all the students for the sidewalk construction later.

HANDICAPPED STUDENTS

d. Drive stakes for pad forms.

e. Hold level rod to establish stake grade.

f. Drive stakes to grade.

g. Hold 0 end of tape to mark form material for length.

h. Hold material for cutting to length.

i. Hold material to stakes for fastening by others.

j. Measure, cut, and install wire mesh reinforcing.

k. Mix concrete batch as determined by others, with power mixer or tub and hoes.

l. Transport concrete in wheelbarrow, and dump in forms.

m. Spread concrete with rake.

n. Puddle edges by bumping form with hammer.

o. Screed to grade with board held on edge and pulled along top of forms.

p. Lower coarse aggregate and raise grout with jitterbug.

q. Mop surface with bull float.

r. Allow to take initial set and finish with sponge rubber float.

s. Spray with curing compound.

t. Allow to cure for initial strength and strip edge forms.

REGULAR STUDENTS	HANDICAPPED STUDENTS
2. TASK b: Install units, as specified.	2. TASK b: Assist in installation of units. TASK DETAIL: As instructed. a. Carry or transport units to locations determined by others. b. Manipulate and hold units in place for installation by others.

M. JOB 13: Install Finish Hardware

1. TASK: Install door and cabinet hardware, as necessary.	1. TASK: Assist in installation of door and cabinet hardware. TASK DETAIL: As instructed. a. Carry and distribute material at locations determined by others. b. Hold passage and cabinet doors for boring or drilling by others.

N. JOB 14: Install Kitchen Built-Ins

1. TASK: Install built-in kitchen appliances.	1. TASK: Assist in installation of built-in kitchen appliances. TASK DETAIL: As instructed. a. Transport or carry appliances to locations determined by others. b. Manipulate and hold appliances in place for installation by others.

O. JOB 15: Install Finish Electrical

1. TASK a: Install electrical outlets, switches, and fixtures.	1. TASK a: Assist in installation of electrical outlets, switches, and fixtures. TASK DETAIL: As instructed.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	a. Carry and distribute materials at locations determined by others.
2. TASK b: Wire all built-in electrical appliances and units.	2. TASK b: Assist in wiring all built-in appliances and units. TASK DETAIL: As instructed. a. Hold flashlight for work illumination, as necessary.
3. TASK c: Connect to electrical service. SAFETY: Warn, stress, alert, and caution about the extreme hazards of sustaining electrical shock.	3. TASK c: Assist in connection to electrical service. TASK DETAIL: As instructed. a. Carry and distribute materials, as necessary to locations determined by others.
4. TASK d: Install all finish electrical plates and covers.	4. TASK d: Assist in installation of all finish electrical plates and covers. TASK DETAIL: As instructed. a. Carry and distribute materials, as necessary, to locations determined by others.

P. JOB 16: Install Floor Covering

1. TASK: Install all carpet, roll vinyl, tile, or other floor covering.	1. TASK: Assist in installation of all carpet, roll vinyl, tile, or other floor covering. TASK DETAIL: As instructed. a. Carry or transport materials to locations determined by others. b. Hold 0 end of tape to determine cuts for width and length. c. Hold, move, or manipulate material for cutting, as necessary.

REGULAR STUDENTS HANDICAPPED STUDENTS

d. Hold, more, or manipulate material for installation by others.

III. APPLICATION: Student Implementation. Job site performance with increasing personal responsibility for safety, proficiency, and accuracy in all aspects and details of work; individual attention, interest, and initiative continuing to improve. Greater development of self-confidence, inter-dependence, and pride in individual and crew accomplishments. Established routine through daily involvement and familiarity with the various tasks performed regularly, consistently, and repeatedly. Site cleanup and orderliness continuing to improve.

IV. SUMMARY: Student Reinforcement. Additional classroom and shop lessons; field trip to commercial site to observe interior finish operation. Time for complete cleanup of site, after completion of interior finish phase. Special attention to any flaw in any part of the finish work.

V. VERIFICATION: Student Success. Objectives and aims achieved when all interior project finish totally complete, and site is ready for next construction phase.

PROJECT: Construct a Single-Family Dwelling

MAJOR BLOCK IV: Install the Project Finish

MINOR BLOCK D: Landscape Product Grounds - - - A Shop Skills Lesson Outline

REGULAR STUDENTS	HANDICAPPED STUDENTS
AIM: The student will be able to perform a variety of skill tasks necessary for landscaping the project grounds, by following directions, as instructed.	AIM: The student will be able to assist in the performance of skill tasks necessary for landscaping the project grounds, by performing a variety of semi-skilled and unskilled tasks, following directions, as instructed.

I. PREPARATION: Student Introduction. Review of foundation lesson plan for similar earthwork tasks; other classroom and shop familiarization, as necessary.

II. DEMONSTRATION: Student Utilization. Supervision and demonstration, as necessary.

A. JOB 1: Cut and Fill Site to Drain

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Set grade stake grid pattern, as necessary.	1. TASK a: Assist in setting grade stake grid pattern.
	TASK DETAIL: As instructed.
SAFETY: Reinforce alertness to avoid injury by axes, machetes, and sledge hammer.	a. Clear underbrush with axes and machetes, as necessary. b. Hold 0 end of tape to establish stake locations, as determined by others. c. Drive stakes flush with ground with sledge hammer at determined locations. d. Drive guard stakes. e. Hold level rod on bench mark for determination of reference elevation by others.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	f. Hold level rod on grade stakes for establishment of cuts and fills, as determined by others.
	g. Write cuts and fills on guard stakes, as determined by others.
2. TASK b: Shape site to grade.	2. TASK b: Assist in shaping site to grade.
	TASK DETAIL: As instructed.
SAFETY: Reinforce pedestrian responsibility, while working around motor vehicles.	a. Protect and preserve grade stakes throughout power machine cutting and filling.
NOTE TO TEACHER: Revise lesson, as necessary, if grading is done by hand.	b. Excavate inaccessible areas by hand, with shovels and other digging tools.
	c. Hold level rod for spot grade checks between grade stakes.

B. JOB 2: Install Site Top Soil

1. TASK a: Dump top soil on site, as necessary.	1. TASK a: Assist in dumping top soil on site.
	TASK DETAIL: As instructed.
	a. Clear path of dump trucks on site, as necessary.
2. TASK b: Spread top soil on site uniformly.	2. TASK b: Assist in spreading top soil on site.
	TASK DETAIL: As instructed.
	a. Spread top soil with hand tools, where inaccessible to power machine spreading.
3. TASK c: Grade top soil to drain.	3. TASK c: Assist in grading top soil to drain.
	TASK DETAIL: As instructed.
	a. Hold 0 end of tape to reset grade stake grid pattern.
	b. Start grade stakes into ground with sledge hammer.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	c. Hold level rod on top of grade stakes for determination of grade by others. d. Drive stakes to grade, as determined by others. e. Drive guard stakes. f. Protect and preserve grade stakes during power machine grading of top soil. g. Hand grade top soil with rakes, hoes, and other digging tools in areas inaccessible to machine grading.

C. JOB 3: Construct Concrete Walks and Drives

REGULAR STUDENTS	HANDICAPPED STUDENTS
1. TASK a: Establish sidewalk and driveway locations.	1. TASK a: Assist in establishment of sidewalk and driveway locations. TASK DETAIL: As instructed. a. Hold 0 end of tape for establishment of locations by others. b. Drive stakes at each end of each edge of walk and drive tangent sections. c. Hold level rod to establish paving grades on top of stakes. d. Drive stakes to paving grades. e. Hold 0 end of tape for establishment by others of radius points for curved sections. f. Drive stakes flush with ground for radius points. g. Drive guard stakes by radius points.
2. TASK b: Set stakes for sidewalk and driveway forms.	2. TASK b: Assist in setting stakes for sidewalk and driveway forms.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	TASK DETAIL: As instructed. a. Pull stringline on grade, between stakes, and along each edge of tangent paving sections. b. Drive stakes to stringline grade at strategic locations, as determined by others, along each edge of tangent sections. c. Hold 0 end of tape on radius points, to establish locations of stakes along each edge of curved paving sections. d. Drive stakes at strategic locations, as determined by others, along each edge of curved paving sections. e. Hold level rod to establish paving grades on top of stakes. f. Drive stakes to paving grades.
3. TASK c: Erect sidewalk and driveway edge forms.	3. TASK c: Assist in erection of sidewalk and driveway edge forms. TASK DETAIL: As instructed. a. Lift, handle, and carry edge form material to work area. b. Hold 0 end of tape for marking material for cutting to length. c. Hold material for cutting to length by others. d. Dig trench for edge forms along each edge of paving sections, as necessary. e. Lift, handle, place and manipulate material for fastening, by others, to form stakes and on grade.

REGULAR STUDENTS	HANDICAPPED STUDENTS
4. TASK d: Prepare sidewalk and driveway subgrade.	4. TASK d: Assist in preparation of sidewalk and driveway subgrade. TASK DETAIL: As instructed. a. Excavate topsoil inside edge forms with digging tools. b. Spread excavated topsoil along outside of edge forms with digging tools. c. Transport sand fill with wheelbarrows from stockpile and dump inside edge forms. d. Pull stringlines across paving areas, from opposite tops of edge forms. e. Spread and grade sand fill with digging tools, checking for depth with stakes marked to grade from stringline. f. Compact sand fill with hand tamps, while sprinkling with water, as necessary.
5. TASK e: Install wire mesh reinforcing, as specified. NOTE TO TEACHER: If other reinforcing specified, revise lesson, as necessary SAFETY: Stress caution and alertness to avoid injury from mesh rolling or whipping back, approximately to original rolled position.	5. TASK e: Assist in installation of wire mesh reinforcing. TASK DETAIL: As instructed. a. Transport wire mesh to work area. b. Unroll wire mesh along outside of paving areas. c. Stand on end of mesh opposite remainder of roll. d. Hold 0 end of tape to mark mesh to length. e. Stand on mesh near end of section to be cut from roll. f. Cut section to be used from roll with bolt cutters.

REGULAR STUDENTS	HANDICAPPED STUDENTS
	g. Turn mesh over, using as many workers as necessary. h. Flatten mesh by lifting each end and walking backward toward center of mesh. i. Lift, handle, carry and place mesh inside edge forms at locations determined by others. j. Repeat process, lapping and tying ends and edges, as specified.
6. TASK f: Install sidewalk and driveway concrete.	6. TASK f: Assist in installation of sidewalk and driveway concrete. TASK DETAIL: As instructed. a. Clear path of transit mix concrete trucks on site, as necessary. b. Lift and hold wire mesh up from subgrade, as concrete is chuted into forms by others. c. Spread concrete uniformly with concrete rakes and screed boards, using top of edge forms for reference grades. d. Puddle concrete against edge forms by bumping forms with hammer. e. Lower coarse aggregate and raise grout with jitterbug. f. Mop surface with full float. g. Allow to take initial set and finish surface with sponge rubber float. h. Spray with curing compound. i. Allow to cure for initial strength and strip edge forms.

REGULAR STUDENTS	HANDICAPPED STUDENTS
D. JOB 4: Plant Lawn Sodding or Seeding, Shrubs and Trees	
1. TASK a: Plant lawn sodding or seeding, as specified.	1. TASK a: Assist in planting lawn sodding or seeding. TASK DETAIL: As instructed. a. Lift, handle, carry, and apply fertilizers, as determined by others. b. Lift, handle, carry, and plant seeding or sodding, as determined by others. c. Apply water, as determined by others.
2. TASK b: Plant or set out site trees and shrubs, as specified. SAFETY: Stress avoidance of skin contact with root stimulant.	2. TASK b: Assist in planting or setting out trees and shrubs. TASK DETAIL: As instructed. a. Lift, handle, and carry trees and shrubs to locations determined by others. b. Dig holes to sizes and depths determined by others. c. Place trees and shrubs in holes according to directions, and as determined by others. d. Apply water, root stimulants, and mulch according to directions, as determined by others. e. Fill holes with earth or topsoil according to directions, as determined by others. f. Protect trees and shrubs with stakes driven into ground, as necessary.

E. JOB 5: Perform Final Cleanup Operations

1. TASK a: Clean project interior.	1. TASK a: Assist in cleaning project interior. TASK DETAIL: As instructed. a. Clean dust, cobwebs, and other accumulations from walls and ceilings, as necessary. b. Clean interior of all windows, as necessary. c. Clean exposed surfaces of all appliances, fixtures, and units, as necessary. d. Clean interior of all cabinet drawers and closet shelves, as necessary. e. Clean all cabinet and door hardware, as necessary. f. Clean all floors, as necessary.
2. TASK b: Clean project exterior.	2. TASK b: Assist in cleaning project exterior. TASK DETAIL: As instructed. a. Clean dirt, mud, mortar and other accumulations from walls and porches, as necessary. b. Clean exterior of all windows, as necessary. c. Clean exposed surfaces of all louvers, vents, or units, as necessary.
3. TASK c: Clean project site.	3. TASK c: Assist in cleaning project site. TASK DETAIL: As instructed. a. Collect and remove all debris from site. b. Load and return all tools and materials to shop storage.

III. APPLICATION: Student Implementation. Job site performance with very high level of personal responsibility for safety, proficiency, and accuracy of work detail; occupational level of individual awareness of accountability, attention, interest, and initiative. High incidence of individual self-confidence, independence, and pride in accomplishments. Daily routine comparable to commercial construction crew.

IV. SUMMARY: Student Reinforcement. Field trip to commercial site to observe landscape operation. Time for general shop cleanup, reorganization, and inventory. Ideal time for social outing to celebrate job completion. Review Major Blocks I-IV.

V. VERIFICATION: Student Success. Objective and aims achieved when project completely ready for sale. Ideal time for major exam covering Major Block just completed. Further review. Final exam covering Major Blocks I-IV.